



COUNTY BOROUGH

OF SOUTHPORT.

REPORT

UPON THE

HEALTH & SANITARY CONDITION

OF THE

County Borough of Southport,

FOR THE YEAR 1913,

BY

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SOUTHPORT :

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1914.

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County Borough of Southport,

1913.

The County Borough of Southport is situated on the north-west coast of Lancashire, on the south side of the Ribble Estuary, 18 miles to the north of Liverpool, and about 35 miles by rail from Manchester. Aspect, north-west.

Site and Soil.—The town is built on a belt of sandhills, which stretches for some miles along this coast, and behind the town lies a great plain of agricultural land of many square miles in extent. The houses, except the business premises in the centre of the town, are mostly detached or semi-detached, with large gardens. The streets are broad and well laid out, and many of them are planted on both sides with trees.

There are in the Borough many large **Institutions**, such as the Southport Infirmary, several Convalescent Hospitals and Homes, Sanatoria, a large number of Schools, and a considerable number of Hotels (both large and small).

The Water Supply is obtained from deep wells near Ormskirk, about eight miles from Southport, belonging to the Southport, Birkdale, and West Lancashire Water Board. An Analysis of the Water by Prof. Thresh, of London, will be found at the end of this Report.

Drainage is partly by gravitation and partly by pumping, the purified effluent being turned into the sea about three miles to the north of the town. Extensive works for pumping and treatment of the whole of the sewage of the extended Borough, on the most modern bacteriological principles, have been erected at the outlet.

Population of Enlarged Borough of Southport at Census, 1911	69,643
Estimated Population at middle of 1913	71,092
Area of Borough (excluding Foreshore, 10,249 acres) in acres...	8,804
Birth-rate, per 1,000 living, in 1913	15.23
Death-rate ,, ,, ,, excluding deaths of visitors...	11.24
Gross Death-rate (deaths registered in the Borough)	12.46
Death-rate from the seven principal Zymotic Diseases.....	0.53
Deaths of Infants under one year of age per 1,000 births.....	93

Date of Incorporation of Southport, June, 1867.

Extension of County Borough of Southport by inclusion of Birkdale and Ainsdale,
April, 1912.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE
OF THE COUNTY BOROUGH OF SOUTHPORT.

GENTLEMEN,

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE
DISTRICT.

Southport is a well-known health resort, built upon a belt of sandhills which fringe the sea coast at this part of Lancashire, and extend for two or three miles inland. Underlying the sand, and stretching out beyond it both seawards and inland is a layer of mossy peat varying in thickness from a few feet in places to nearly twenty feet immediately behind Southport. The peat overlies a bluish-grey silt, which containing as it does both marine and fresh water shells, is considered by geologists to have been formed in marshy ground which must have been subject at times to marine incursions. At Crossens, to the north of Southport, the sub-soil consists of alluvium, and in this part of the Borough several boulders have been discovered, and two interesting specimens of them, one of carboniferous limestone, and the other of Eskdale granite, are now preserved in the Crossens churchyard. These specimens carry us back to a very remote geological period, when atmospheric, climatic, and other conditions must have been very different from what they are to-day.

The site of Southport, apart from the unevenness caused by the varying heights of the sandhills, is generally a flat one, and the adjoining country for some miles around is also flat. The natural drainage of the district is towards the sea, with a slow but steady flow in that direction.

SOCIAL CONDITIONS.

Southport is mainly occupied by a residential population composed of persons engaged in business in Liverpool and Manchester, and other large Lancashire towns in its immediate vicinity, and of many persons who have retired from business or professions. A considerable number of its population is engaged in letting lodgings, and in the occupations connected with catering for visitors, and another portion of the population, principally in the Marshside and Church town districts, is extensively engaged in the fishing trade, both for home and export consumption. The district is free from manufactories of any kind except the large motor-car manufactory at Crossens, and other smaller motor works in other parts of the Borough.

In addition to the number of working men engaged in the motoring industry, a considerable part of the working classes of the Borough are engaged in the Highways, Gas, Electricity, Tramways, and other departments of the Southport Corporation, while others are engaged on the railways, and others follow the occupations of painters, carpenters, gardeners, carters, and labourers; and among women-workers proportionally a very large number are engaged as domestic servants, while others are engaged in housekeeping, dressmaking, millinery, laundry work, teaching, nursing and as charwomen.

There is no occupation in the district which can be considered to have any special bearing on Public Health.

The amount of Poor-Law Relief, and the extent to which Hospital and other forms of gratuitous medical relief are utilised in the Borough, may be gathered from the following facts:—

The number of persons in receipt of Out-door Relief in the County Borough of Southport during the week ending May 30th, 1914, was 378.

The amount of Relief expended was £40 12s. 5d.

The number of Patients treated at the Southport Infirmary during the last two years have been as follows:—

	1912.	1913.
In-patients—Total number treated ...	766	753
Out-patients—Total number treated...	3730	3327

Further assistance is given to the poor by the Southport and Birkdale Provident Society, and by the Southport and Birkdale District Nursing Society, though the number of cases dealt with by these Societies is not published.

VITAL STATISTICS.

The population of Southport, including Birkdale and Ainsdale, as estimated by the Registrar-General, to the middle of 1913, was 71,092.

Assuming the sex distribution to have been the same in 1913 as it was at the time of the Census in 1911, the respective numbers of males and females in the Borough were, in 1913, as follows:—

Males	28,952
Females	42,140

These figures show the proportion of males to females to be 100 males to 145 females, and an excess of females in the population of 13,198. The Census of 1911 showed a slight increase in the proportion of females to males as compared with the previous Census, viz.: from 142 females to 100 males in 1901, to 145 females to 100 males in 1911.

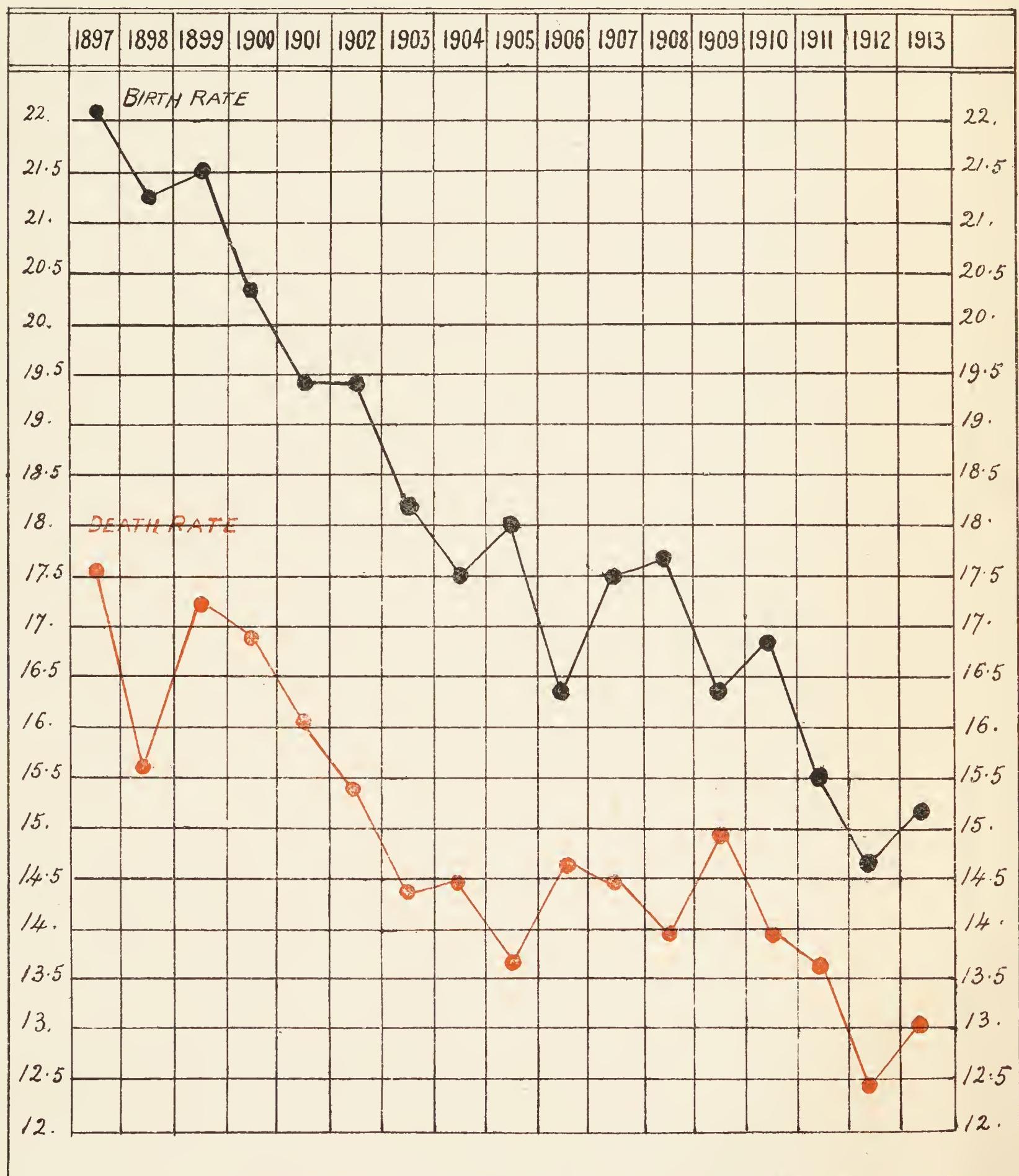
BIRTH RATE.

The births registered in the Borough during the year 1913 were 1083, consisting of 532 males and 551 females. The resulting birth rate was 15.23 per 1000 of the population, which is .52 per 1000 higher than the rate for the previous year. The birth rate in Southport was at its highest point in 1877, when it was 33.87 per 1000, but since that date it has, with slight fluctuations, steadily fallen to its present figure.

DEATH RATE.

The number of deaths actually registered in the Borough, and including three deaths in the Borough Infectious Diseases Hospital in Moss Lane (an institution which, although situated just beyond the Borough Boundary, is

DIAGRAM SHOWING DECLINE IN THE BIRTH RATE (IN BLACK) & DEATH RATE (IN RED)
OF THE COUNTY BOROUGH OF SOUTHPORT FROM THE YEAR 1897 TO 1913.
(FOUNDED ON NETT FIGURES FROM TABLE I.)



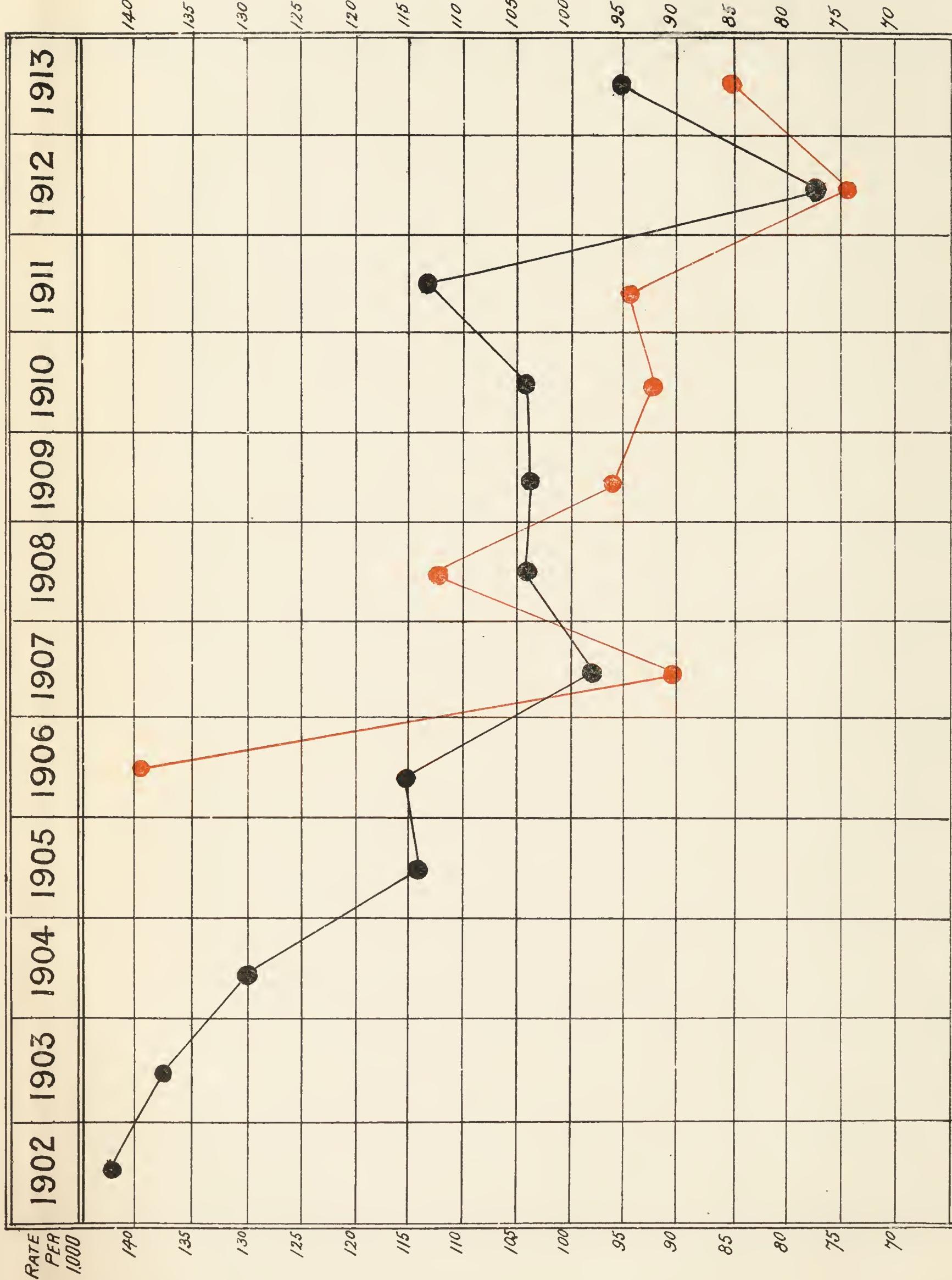


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DIAGRAM SHOWING THE INFANTILE MORTALITY (PER 1000 BIRTHS)
IN SOUTHPORT (IN BLACK) & IN BIRKDALE & AINSDALE (IN RED)



counted here as within the Borough) was 886, of which 406 were males and 480 females. These figures give a gross death rate of 12.46 per 1000 of the population, against 12.58 per 1000 the previous year, and is the lowest gross death rate of the Borough yet recorded.

If, however, from the above 886 deaths are deducted 87 deaths of visitors who came into the town in a precarious state of health and died after only a short stay here, there remain 799 deaths, from which, by calculation, a "local" death rate of 11.24 per 1000 is obtained, also the lowest "local" death rate yet recorded.

For the purpose of making comparisons between the death rates of different towns, of which the populations vary in age and sex distribution, the Registrar-General applies a factor for correction, based upon the population at the last Census. The factor for the Borough of Southport, as constituted prior to 1st April, 1912, is .9245, and after that date .9345. The "corrected" death rate for Southport for 1913 is therefore the nett death rate, 13.05 per 1000 (Table I. at end of Report), multiplied by the factor, .9345, which makes 12.19 per 1000.

The visitors who came into the Borough in a more or less moribund condition numbered 87, as against 88 the previous year.

The average stay in Southport of these visitors was 90 days, and varied from one day in the shortest case to 11 months in the longest case. The principal causes of death among these visitors were in numerical importance as follows:— Heart Diseases (10 deaths), Bronchitis (7 deaths), Nephritis (7 deaths), Pulmonary Tuberculosis (7 deaths), Cancer (5 deaths), Cerebral Haemorrhage (4 deaths), and Heart Failure (4 deaths).

Forty-six deaths, due respectively to Measles (3 deaths), Scarlet Fever (1 death), Diphtheria (2 deaths), Whooping Cough (5 deaths), Typhoid Fever (1 death), and Diarrhoea (34 deaths), gave a Zymotic Death Rate of .65 per 1000.

The 34 deaths during the year from Infantile Diarrhoea, are referred to again under the paragraph in this Report dealing with Infantile Mortality.

INFANTILE MORTALITY.

The number of deaths of infants belonging to Southport under one year of age, who died during the year 1913, was 101. As the number of births during the same period was 1083, the infantile death rate works out at the rate of 93 per 1000. The rates for the previous three years were respectively 104, 113, and 77 per 1000. The rate for last year of 93 per 1000 was, with the exception of the remarkably low record of 77 per 1000 in the previous year, the lowest on record in the Borough.

Speaking generally, Southport stands well as regards this rate, and the outlook for the future is also good. During the last six or seven years the rate has ranged round about 100 per 1000, while during the previous 10 years it ranged from 114 to 181 per 1000.

Last summer was a dry and hot one, and 34 deaths from Summer Diarrhoea occurred in the months of July, August, and September, among infants under twelve months of age. Although these deaths were principally confined to the Boundary Street and Chatham Road districts of the Borough, in previous years the distribution of such deaths has not been confined to any one part of the Borough. In every one of these cases special enquiry is made into the surroundings and sanitation of the dwelling, and all steps are taken to remedy, if possible, any defects found.

The Notification of Births Act, 1907, was adopted by the Southport Corporation, and came into force in the Borough on February 1st, 1908. Under this Act medical men and midwives are called upon to notify to the Medical Officer of Health, within thirty-six hours after the event, the births of all children attended by them. The information so obtained is of great value in preventing early deaths of infants, as previous to the adoption of the above Act, a period of six weeks or more after a birth could elapse before knowledge of that birth was obtained by us, and, in fact, in many cases the death of a child was certified to us before the notification of the birth had reached us. Since the Act was adopted, the percentage of births notified has been as follows:—In 1908 (part of year), 86 per cent. of the births; in 1909, 87 per cent.; in 1910, 88 per cent.; and in 1911, 85 per cent. Of the 1028 births registered in the enlarged Borough in 1912, 773 were notified, but during the first three months of the year before the amalgamation of Southport and Birkdale, none of the births which occurred in Birkdale or Ainsdale were notified, as the Notification of Births Act was not then in force in either of those townships.

In 1913 there were 1083 births registered in the Borough, and of these 950 were notified, or about 88 per cent.

The Supervision of Infants is carried out by the Infantile Mortality Nurse, Miss Gibson, who does her work conscientiously and with tact. When visits are made by the Nurse, attention is given not only to the infant visited, but in all cases to the general condition and cleanliness of the homes and of the children, to the manner of feeding the infants, whether natural or artificial, and in the latter case to the cleanliness or otherwise of the utensils used for preparing and administering the food. Mothers are urged to suckle their babies whenever possible.

The health of the children is enquired into, also the number of children born and living, the causes of death where any have died—the latter often giving an indication as to advice needed.

The occupation of the mother before and after the birth is also enquired into.

Re-visits are made according to the health of the child, and the need of supervision owing to incapability, carelessness, or neglect on the part of the mother; some visits being made weekly, others fortnightly, monthly, or quarterly, while some cases are not re-visited. Special cases, such as those of ophthalmia neonatorum, marasmus, etc., are visited very frequently as long as there is the necessity.

The weights of the infants are recorded.

In her reports Nurse Gibson states that while the majority of mothers willingly carry out any instructions she gives them, in some cases, owing to lack of means, parents are utterly unable to provide suitable food, and "it would be well if some scheme were devised by which the children of necessitous and deserving poor might be provided with extra nourishment."

Referring to the outbreak of Diarrhœa, she states that where these cases occurred "poverty and overcrowding are greatest, many of the houses being sublet, and the rooms having no cupboard accommodation, food is necessarily left on tables, becoming contaminated by swarms of flies which, to a great extent, are carriers of this disease."

INFECTIOUS DISEASES.

The following infectious diseases are now compulsorily notifiable in Southport, viz. :—

Plague.	Relapsing Fever.
Small-pox.	Continued Fever.
Cholera.	Puerperal Fever.
Diphtheria.	Chicken Pox.
Membranous Croup.	Measles.
Scarlet Fever (Scarlatina).	Whooping Cough.
Erysipelas.	Acute Poliomyelitis.
Typhoid Fever.	Cerebro-Spinal Meningitis.
Typhus Fever.	Ophthalmia Neonatorum.
Enteric Fever.	

The total number of cases of infectious disease notified in the Borough during the year is shown in Table II. at the end of this report.

INFECTIOUS DISEASES HOSPITAL.

The Hospital contains accommodation altogether for 88 patients. Three wards respectively contain 22 beds, 16 beds, and 10 beds, and an observation ward contains 8 beds. In addition there is a special pavilion, with accommodation for 20 patients, erected for and maintained by the Private Schools Association ; and there is also a special pavilion on another site, with 12 beds, for cases of Small-pox. All these buildings are in good sanitary condition, but two of the older portion are becoming somewhat dilapidated externally from age.

The sewage of the Hospital is efficiently dealt with by means of a small installation of bacterial filter beds.

TREATMENT OF TUBERCULOSIS.

During the last few years great steps have been taken to prevent the ravages of consumption. By the Order of the 18th December, 1908, the notification of cases of pulmonary tuberculosis, under the charge of Poor-Law Medical Officers, was enforced, and by the Order of 22nd March, 1911, all cases of pulmonary tuberculosis among patients attending at, or in voluntary hospitals, were made compulsorily notifiable. On the 1st January, 1912, all cases of pulmonary tuberculosis occurring in private medical practice were made compulsorily notifiable, and on 1st February, 1913, the notification of all forms of tuberculosis, whether pulmonary or non-pulmonary, and whether in private, hospital, or poor-law practice, was made compulsorily notifiable.

The National Insurance Act, passed on the 16th December, 1911, contained provisions for dealing with tuberculosis among insured persons, and the Government has since agreed to pay to any local Authority half the cost of any treatment provided to the dependants of insured persons, and also to other members of the community.

The provision now made in Southport for dealing with consumption consists of:—

- A Tuberculosis Dispensary in Post Office Avenue, Southport;
- Ten Hospital Beds at Birkdale, for early, doubtful, or advanced cases;
- Sanatorium Beds at Meathop, Blencathra, or Woodburn, Edinburgh.

The Staff dealing with tuberculosis, in addition to myself as Tuberculosis Officer, consists of a Tuberculosis Nurse, Miss Willder, and at the hospital, a Matron and two Nurses.

During the year ending December 31st, 1914, 64 patients have attended at the Dispensary, making 414 attendances, and Miss Willder, the Tuberculosis Nurse, has paid 856 visits to patients at their own homes. The contacts enquired into numbered 565, viz.: Adults, 308; Children, 257.

Ninety-two specimens of sputum were examined during the year, and of these 36 were certified to be tuberculous, and the remaining 56, non-tuberculous. In all cases after death or removal of a patient, the premises are thoroughly disinfected.

In the Birkdale Hospital, 20 cases were treated as in-patients during the year, six of these being insured persons, and 14 uninsured, with results as shown in accompanying tables:—

TABLE SHOWING RESULTS AMONG PATIENTS SUFFERING FROM TUBERCULOSIS,
WHO RECEIVED TREATMENT IN BIRKDALE HOSPITAL DURING THE YEAR 1913:

Total number of Cases treated—20.

	Insured.			Not Insured.			Total
	Men.	Wo-men.	Total	Men.	Wo-men.	Chil-dren.	
Rendered fit for work	—	I	I	—	5	—	5
Improved	—	—	—	—	—	2	2
Without Improvement	I	—	I	I	I	—	2
Died	I	—	I	2	I	—	3
Still under treatment on December 31st, 1913	I	2	3	I	I	—	2
	3	3	6	4	8	2	14

Twenty-one patients were sent for treatment to Sanatoria (at Meathop, Blencathra, or Edinburgh) with results as shown in accompanying table:—

TABLE SHOWING RESULTS OF TREATMENT OF PATIENTS SENT TO
SANATORIA DURING THE YEAR 1913:

No. of Cases treated—21 (all insured).

	Men.	Women.	Total.
Rendered fit for work	4	I	5
Improved	7	3	10
Without Improvement	I	—	I
Died	I	I	2
Still under treatment on December 31st, 1913	I	2	3
	14	7	21

The total number of cases of Tuberculosis notified in the Borough (including all forms of the disease, and excluding duplicate notifications) was 254.

Of these, 148 were notifications of Pulmonary Tuberculosis (72 males and 76 females), and 106 were notifications of Non-pulmonary Tuberculosis (52 males and 54 females). Of these notifications, 51 were of insured persons, the remainder being of uninsured persons.

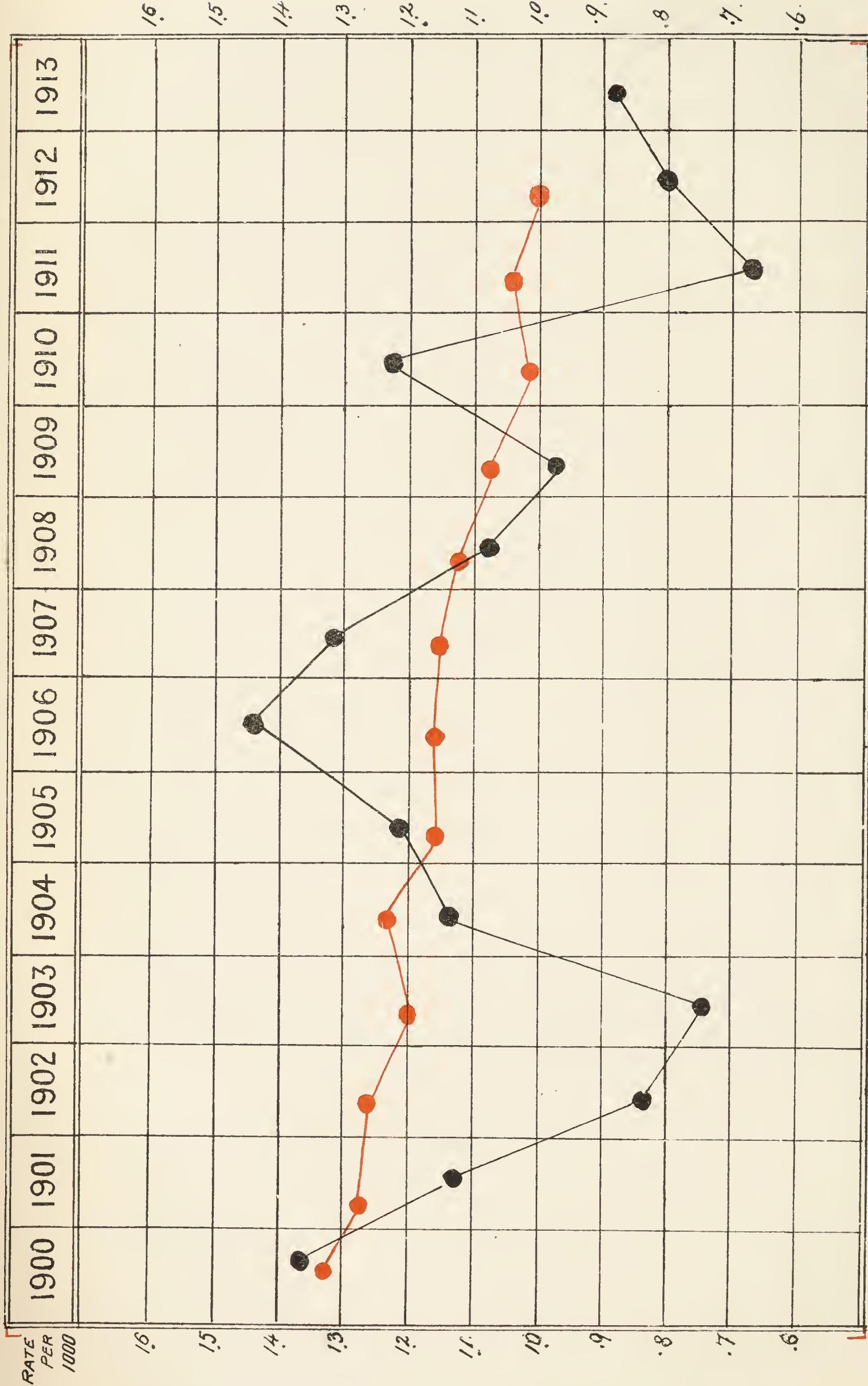
The above 254 cases were being treated as follows:—

The total number of deaths during the year 1913 in the Borough from all forms of Tuberculosis, and including 13 deaths from Tuberculosis belonging to Southport which occurred in the Ormskirk Workhouse, was as follows:—

From Pulmonary Consumption	62	deaths.
From Non-Pulmonary Consumption	23	„
—		
Total from all forms of Consumption	85	

(3)

DIAGRAM SHOWING FOR COMPARISON THE DEATH RATES FROM CONSUMPTION OF LUNGS PER 1000 OF THE POPULATION IN ENGLAND & WALES (IN RED) & IN SOUTHPORT (IN BLACK)



In the month of November a Tuberculosis Exhibition was held in the Cambridge Hall, under the auspices of the National Society for the Prevention of Consumption. The Exhibition, which lasted four days, was attended by upwards of 10,000 people, including a large number of the Elementary School Children, for whose attendance special arrangements had been made.

Since the Exhibition, and to further popularise the kind of information given by the Exhibition, a series of popular Lectures, eleven in number, and illustrated with lantern slides, have been given by myself in various parts of the Borough.

The number of deaths from Pulmonary Consumption in Southport during the last five years is shown in the following table:—

Year.	Estimated Population.	Nett Deaths from Pulmonary Consumption.		Death Rate per 1,000 of Population.	
	
1909	51,027	.....	50	..... .98
1910	51,383	.....	63	..... 1.23
1911	51,740	.....	35	..... .68
1912	70,640	.....	57	..... .81
1913	71,092	.....	62	..... .87

The number of notifications of Pulmonary Tuberculosis (excluding duplicates) in 1912, was 211; and of all forms of Tuberculosis in 1913, 254.

The accompanying diagram shows the death rate from Consumption of the Lungs in Southport, and in England and Wales. The rate for England and Wales is not obtainable after the year 1912.

The following special Bye-Laws against spitting on the footpaths and in other public places, has now been in force in the Borough since August, 1911:—

No person shall spit upon ANY PUBLIC FOOTPATH.

No person shall spit on the floor, side, or wall of any public carriage, or of any public hall, public waiting-room, or place of public entertainment, whether admission thereto be obtained upon payment or not.

Any person offending against any of the foregoing Bye-Laws shall be liable to a penalty not exceeding Five Pounds.

During the year two persons were proceeded against under these Bye-laws, and fined respectively 2s. 6d. and 5s., with costs in each case.

The occupations of the patients belonging to Southport who died from Tuberculosis during the year were as follows:—

Patients with Pulmonary Consumption.

Spinsters	12	Reader at Printing Works...	1
Porters	3	Commercial Cashier	1
Housewives	13	Railway Audit Inspector ...	1
Hawkers	4	Railway Carriage Cleaners	2
Labourers.....	2	Railway Ticket Collector...	1
Master Stonemasons	2	Bookseller	1
J Journeyman Stonemason	1	Newsagent	1
J Journeyman Wheelwright	1	Newsvendor	1
J Journeyman Bricklayer	1	Gardener	1
J Journeyman Joiner.....	2	Cabdriver	1
Mechanic	1	Waiter	1
Cutler	1	Domestic Servant.....	1
Cooper	1	Shoemaker's Apprentice ...	1
Master Draper	1	Of independent means ..	1
Linotype Operator.....	1	Coal Merchant	1

Total: 62.

Patients with Non-Pulmonary Consumption.

Spinsters	2	J Journeyman Tailor	1
Porter	1	Dressmaker	1
Infants	14	Master Mariner	1
School Children	2	Merchant Shipper	1

Total: 23.

Total 85.

To complete the scheme for the treatment of Tuberculosis, it is proposed locally, though the scheme has not yet been approved by the Insurance Commissioners or the Local Government Board, that in addition to myself as Tuberculosis Officer, the services of a Medical Consultant Specialist in Tuberculosis be engaged from Liverpool, to visit Southport weekly, or as often as necessary.

The present practice with regard to "contacts" is for the Tuberculosis Nurse to visit the home in the first instance, and to instruct any member of the family about whose health there is the slightest doubt, to visit the Dispensary, where he or she is carefully examined by the Tuberculosis Officer, and, when considered necessary, other tests such as that of Von Pirquet, are made. Where the patient is unable to visit the Dispensary, he or she is visited by the Tuberculosis Officer.

Speaking generally on the work being done in Southport in connection with Tuberculosis, I may state that as far as I know there is not a single case of Tuberculosis in the Borough, either of an insured or uninsured person, which is not under observation and having treatment. Some of the poorest are receiving assistance, both medical and financial, from the Board of Guardians; others, especially children with tubercular glands, from the Southport Infirmary; others from private medical practitioners, and others at the Dispensary. All these cases are also kept under observation from the Tuberculosis Dispensary.

Although no uninsured persons have been sent away to Sanatoria, the greater number of persons treated in the Birkdale Hospital have been uninsured persons, and the numbers have included both adults and children. It is satisfactory to be able to report that the cases treated at the Birkdale Hospital, excepting where they have been hopeless from the beginning, have done exceedingly well. Some credit for this is certainly due to the interest, attention, and care bestowed upon the patients by the Matron and Nursing Staff of that Institution.

TUBERCULOSIS STATEMENT OF ACCOUNTS FOR THE YEAR ENDING
31ST MARCH, 1914.

DISPENSARY.

EXPENDITURE.			INCOME.		
	£	s. d.		£	s. d.
To Medical Officer of Health.....	100	0	By Insurance Committee	118	14 4
,, Nurse Willder	88	10 3	,, Government Grant	49	10 9
,, Rent	48	11 8	,, Balance charged to Rates	182	1 2
,, Rates, Taxes, Insurance	8	13 7			
,, Heating and Lighting	15	4 1			
,, Drugs and Medical Appliances...	9	14 10			
,, Travelling Expenses of Staff ...	6	10 4			
,, Printing and Stationery	2	0 10			
,, Repairs	3	0 8			
,, Tuberculosis Exhibition	59	14 6			
,, Expenses of Town Clerk and Medical Officer of Health to London	8	5 6			
	£350	6 3		£350	6 3

BIRKDALE HOSPITAL.

	£	s. d.		£	s. d.
To Salaries and Wages of Matron and Servants	170	18 4	By Government Grant	452	0 0
,, Loan Charges	161	16 2	,, Balance, charged to Rates	534	9 10
,, Rates, Taxes, Insurance	4	8 7			
,, Renewals, Repairs, Painting ...	67	4 9			
,, Salaries of Nurses	110	9 5			
,, Provisions	223	1 8			
,, Drugs and Medical Appliances...	27	13 5			
,, Heating and Lighting	83	15 5			
,, Miscellaneous	18	17 1			
,, Ground Rent	105	18 9			
,, Telephone Rents and Fees.....	12	6 3			
	£986	9 10		£986	9 10

Population—71,747.

Total Expenditure during the Financial Year, 1913-14, per head of
Population, 4.47 pence.

SCARLET FEVER.

The number of cases of Scarlet Fever notified during the year 1913 was 89, of which 56 were removed to hospital. Tables V. and VI. at the end of this Report contain further particulars as to the number of cases of this and other infectious diseases in the Borough during the last ten years.

The following table shows the number of cases notified in the Borough during recent years, and the number of these removed to hospital:—

	No. of Cases of Scarlet Fever notified in the Borough.	No. of Cases Removed to Borough Hospital.	Percentage of Cases Removed to Hospital.
1907	88	60	68 per cent
1908	104	79	76 ,,
1909	200	160	80 ,,
1910	91	72	77 ,,
1911	97	75	77 ,,
1912	81	48	59 ,,
1913	89	56	63 ,,

During late years both the virulence and mortality of Scarlet Fever have rapidly decreased. Some years ago epidemics of this disease have been known in which the mortality was over 20 per cent. About fourteen years ago in Southport the mortality recorded for the previous ten years (1891—1900) was 4.37 per cent. The mortality for the last ten years (1904—1913) has fallen to 2.65 per cent., and during the last five years (1909—1913), although there have been 411 cases, the mortality has been only about 1.4 per cent. The reason for this improvement is difficult to find, though possibly it is due to some extent to improvements generally in the sanitary condition of the people, and to some slight improvements in treatment, and also to the possibility of the people becoming naturally in some way more immune to the disease.

DIPHTHERIA AND MEMBRANOUS CROUP.

There were 42 cases of Diphtheria notified in 1913 with 2 deaths, as against 59 notified in 1912 with 11 deaths. The average annual number of cases for the previous ten years was 38, with an average of 5 deaths per year. Of the 42 cases notified, 19 were treated at the Borough Hospital, and 23 at their own homes. During the last ten years the death rate among the 223 cases treated at home has been 16.14 per cent., while among the 161 cases treated in the Hospital it has been 8.7 per cent. This difference may be due to some extent, possibly, to some of the severer cases being kept at home, but it is a fact also which may well be borne in mind by parents when hesitating about the advisability of allowing their children to be removed to hospital.

ENTERIC OR TYPHOID FEVER.

The number of cases of this disease notified during the year was four, a smaller number than in any previous year. There was one death. The average annual number of cases for the previous ten years was 11, and the average number of deaths 1.8. During the last few years there has been a very striking reduction in the number of cases of, and deaths from, this disease in the Borough. The annual average number of cases of Typhoid Fever notified during the ten years ending in 1903 was 36, while since that time the number has steadily fallen, until during the last five years the average number of cases notified has been only just over six per year. The deaths also have fallen from an average of about ten per annum for the ten years up to 1903, to only just over one per annum for the last ten years.

See Diagram No. 1.

CHICKEN-POX.

During the year there were 362 cases of this disease notified, as against 349 in the previous year. The average annual number notified during the last ten years was 185. There have been no deaths either last year or in previous years.

MEASLES.

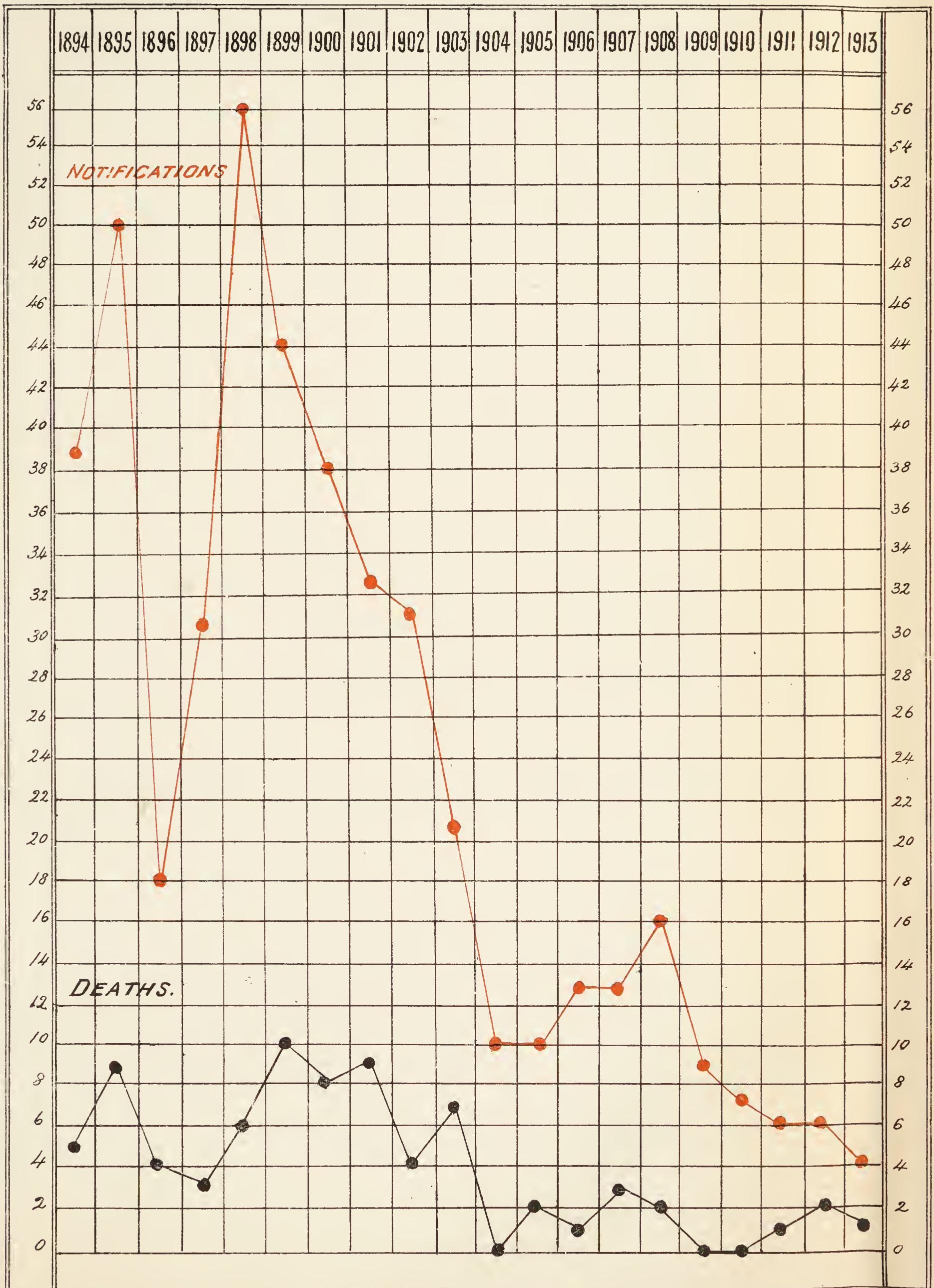
The number of cases notified was 1170, with 3 deaths. In the previous year the number notified was 1008 cases, with 6 deaths.

Measles has been compulsorily notifiable in Southport since May 8th, 1902. The following table shows the number of notifications since May, 1902, and the total deaths since 1891:—

Year.	Population under 15 years of age.	Notification of Measles in Borough of Southport.	Deaths from Measles in Borough of Southport.
1891	Census 1891—12,089	.....	..... 1
1892 14
1893 3
1894 1
1895 1
1896 6
1897 4
1898 7
1899 4
1900 2

(1)

DIAGRAM SHOWING THE NUMBER OF NOTIFICATIONS (IN RED) & DEATHS (IN BLACK)
FROM TYPHOID FEVER IN THE BOROUGH DURING THE LAST 20 YEARS.



Year.		Population under 15 years of age.		Notification of Measles in Borough of Southport.		Deaths from Measles in Borough of Southport.
1901	.....	Census 1901—12,520	.....	—	.....	1
1902	.....	—	.....	602	.....	7
1903	.....	—	.....	846	.....	12
1904	.....	—	.....	504	.....	9
1905	.....	—	.....	627	.....	6
1906	.....	—	.....	278	.....	4
1907	.....	—	.....	449	.....	7
1908	.....	—	.....	189	.....	2
1909	.....	—	.....	1183	.....	7
1910	.....	—	.....	171	.....	0
1911	.....	Census 1911—21,984*	.....	868	.....	3
1912	.....	—	.....	1008	.....	6
1913	.....	—	.....	1170	.....	3

*Population of enlarged Borough.

WHOOPING COUGH.

The number of cases of Whooping Cough was 459, with 5 deaths. In the previous year the numbers were 458 cases, and 3 deaths.

Although during the last ten years the number of cases of Measles and Whooping Cough has been large, the death rate from these diseases has been fortunately low, viz.: 0.73 per cent. for Measles, and 1.44 per cent. for Whooping Cough.

* CANCER, MALIGNANT DISEASE.

The number of deaths from Cancer which occurred in the Borough during 1913 was, after deducting the deaths of non-residents in Public Institutions, 99. The number of deaths for each of the previous ten years was as follows:—46, 52, 56, 56, 67, 59, 57, 51, 62, and 76. Although the figure of 99 for 1913 appears to be considerably higher than the average of previous years, if the increase of population resulting from the extension of the Borough in 1912 is borne in mind, the difference between the rate for the enlarged Borough for 1913, and the highest rate during the previous ten years for Southport is not great, viz., between 1.33 per 1000 of the population in 1907, and 1.38 per 1000 in 1913.

Of late in the Press, considerable discussion has taken place as to the possibility of Cancer being connected with houses, such a connection giving rise to some houses where several cases have occurred being called "cancer houses." Some years ago I made a careful investigation into the matter as it affected, or might affect Southport, but after investigating all the cases of cancer occurring in Southport for about ten years before the date of enquiry, I could find no evidence whatever in support locally of such a theory.

DAIRIES COWSHEDS, AND MILKSHOPS.

The above premises have been regularly visited during the year, and their condition, and that of milk-supplying cows, both within the Borough, and also by virtue of the powers obtained in the Southport Corporation Act of 1900, as far as practicable outside the Borough, kept under careful observation.

During the year 96 samples of milk were chemically analysed. Of these 86 were found to be genuine and of good quality. Of the remaining 10, none were reported by the analyst to have water added, but the samples were deficient in fat—the deficiency varying from 2 to 17 per cent. Further particulars on this matter are given in this report under the paragraph: "Samples of Food and Drugs taken for Analysis."

Sixty-nine samples of milk were examined bacteriologically. Of these five were certified to be Tuberculous. Some of these samples were duplicate samples from the same set of cows, taken in order to ascertain the individual cow or cows actually diseased. Of the original samples (excluding duplicate samples), the percentage tuberculously affected was 3.5 per cent. (2 samples out of 56). Last year the percentage of tuberculous milk was 7 per cent. On account of the delay at present necessarily involved in the bacteriological examination of milk, and the frequent changes made by milk sellers of their stock, it is often very difficult, if not impossible at times, to identify the actual cow giving tuberculous milk. In all cases careful investigation and examination by the Veterinary Surgeon and Inspector Kendall of the cattle on the farms from which the samples are taken, are made, and animals, evidently diseased, are at once removed.

Many samples of milk have been taken on its arrival by the early morning trains. In several cases the milk was found dirty, and the producers were warned.

A general supervision and inspection of farms outside the Borough from which milk is sent into the Borough is regularly made by Inspector Kendall.

TUBERCULOSIS ORDER OF 1913.

This Order—issued by the Board of Agriculture and Fisheries—came into force on the 1st of May, 1913, and its objects are the prevention of Tuberculosis by Milk—and in bovine animals. The Order requires every person having in his possession or under his charge:—

(i.) Any cow which is, or appears to be, suffering from tuberculosis of the udder, indurated udder, or other chronic diseases of the udder; or

(ii.) Any bovine animal which is, or appears to be, suffering from tuberculosis with emaciation,

to immediately notify the fact to the Inspector of the Local Authority. The Local Authority are required to have all tuberculous animals coming under their notice slaughtered, and compensation is payable under certain limitations to owners.

The action taken under the Order in Southport was as follows:—

Tuberculous Animals—

(a) Discovered by Inspector	1
(b) Notified by Owners	3
Total	4

These four cows were slaughtered, and after compensating the various owners to the extent of £2, 30s., 30s., and 30s. respectively for the carcases, and allowing for the salvage of the hides and the grant made by the Board of Agriculture, the net cost of compensation chargeable to the rates amounted to £1 5s. 5d.

In all cases where diseased animals are found, the premises are afterwards thoroughly disinfected.

HOUSE TO HOUSE INSPECTION.

The erection of all new buildings in the Borough is carefully supervised by the Building Surveyor, Inspector Wheatley, and an assistant, who devote the whole of their time to the work, and the building bye-laws are strictly observed.

New Bye-Laws have been drafted and await the approval of the Local Government Board.

To comply with Article V. of the Housing (Inspection of District) Regulations, 1910, the following table is inserted:—

Number of dwelling-houses inspected under and for the purpose of Section 17 of the Act of 1909	8
Number of dwelling-houses which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	8
Number of representations made (in 1913) to the local authority with a view to the making of Closing Orders	0
Number of Closing Orders made	0
Number of dwelling-houses, the defects in which were remedied without the making of Closing Orders...	8
Number of dwelling-houses which, after making of Closing Orders (in previous year), were put into a state (in 1913) fit for human habitation	2

The number of new houses erected and certified in the Borough during the last three years has been as follows :—

New houses erected and certified in 1911-12	44
,, ,, 1912-13	107
,, ,, 1913-14	117

Of the 117 houses built in 1913-14, about 21 were houses to be let at about 7/6 or less per week—the remainder were houses of higher rental. During the three years, very few, if any, small houses have been built in Ainsdale, and only about 4 in Crossens. About 12 however, are in course of construction at Crossens at the present time.

HOUSING ACCOMMODATION.

In my last two Annual Reports I dealt pretty fully with the matter of the Housing Accommodation of the Working Classes in Southport.

In July last, acting upon the instructions of the Committee, I furnished the Committee with the following report. No further steps have since been taken in the matter.

TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

In accordance with your instructions, I now present to you the following report on the Housing accommodation in the Borough, and at your request have classified the information under the following headings :—

- (1) The number of houses let out in lodgings, or occupied by more than one family.
- (2) The number of houses in the various Wards let out at rents up to and not exceeding 8/6 per week, inclusive of rates.
- (3) The infantile death rate in Birkdale and Ainsdale.
- (4) Similar information to that contained in the report of the Finance Committee on Workmen's Dwellings, made in 1895, such information to be brought up to date.

(1) Taking these headings seriatim, of the first it may be said that it is impossible without an actual house to house canvas of the Borough to give thoroughly reliable information on this matter, but the following particulars are founded on information available in the Health Office, and also on information kindly provided me by persons whose daily occupation gives them the opportunity of knowing the Housing conditions of the different roads and streets referred to. The condition of housing of every Ward in the Borough has been considered, and the streets or roads in each Ward, known, or thought, to have houses let in lodgings, are here mentioned.

EAST WARD—BIRKDALE.

In Chatham Road and Broome Road, about one-fourth to one-half of the houses are let in lodgings, or in other words in these roads each of the houses referred to is occupied by two or more families. In Bury Road, Kew Road, Matlock Road, and Stamford Road, there are houses let in lodgings, but not to the same extent as in the two roads first mentioned. There are few or no houses known to be let in lodgings in other parts of this Ward.

NORTH WARD—BIRKDALE.

In Grove Street, Fernley Road, and Elm Road, about one-fourth of the houses are let in lodgings. There are few, if any, probably in Upper Aughton Road or Vaughan Road.

WEST WARD—BIRKDALE.

No houses let in lodgings.

SOUTH WARD—BIRKDALE.

In Sandon Road and Shaftesbury Road possibly there are a few houses let in lodgings.

SOUTHPORT.

MARSHSIDE.

There are some back to back houses in this part of the Borough, possibly fifty altogether. These are houses which were originally built as single houses intended for one family, but each house has since been divided into two houses, with an additional staircase provided, and is now occupied by one family in the front portion of the house, and another in the back portion. Other houses in this part of the Borough are also let in lodgings.

SCARISBRICK WARD.

In High Park Road and Old Park Lane there are a few back-to-back houses similar to those in Marshside, and other houses let in lodgings. In Bispham Road and Poulton Road there are probably no houses let in lodgings.

SUSSEX WARD.

In Hart Street there are a few houses let in lodgings.

CRAVEN WARD.

In Back Virginia Street there are a few houses let in lodgings, and also perhaps a few in Hargreaves Street.

TALBOT WARD.

In Sussex Road, Zetland Street, and in St. Luke's Road there are one or more houses let in lodgings.

MARINE WARD.

None.

CENTRAL WARD.

In Tulketh Street and Bridge Street, during the summer, temporary lodgers are taken in in many of the houses, but none of the houses are probably let in lodgings during the rest of the year. In Back Tulketh Street there may be a few houses let in lodgings.

WEST WARD.

There are a few houses let in lodgings in Banastre Road, the end of Linaker Street, and also in Back Banastre Road, and individual lodgers are taken in other houses in this Ward.

SOUTH WARD.

In Boundary Street, Warwick Street, and the Birkdale end of Hampton Road, practically every house contains two or more families. The reason invariably given by these people is that at the rents of 7/6 and 8/- a week it is impossible for one family to occupy a house to itself.

In Crossens there is a distinct shortage of houses for working people. At the present time there is a strong demand for houses, particularly by employees of the Vulcan Motor Works, and I am informed there is not a single house to let. Also since the erection of the Vulcan Motor Works it is stated that for new tenants at least, rents have gone up generally, quite 20 per cent., while others state that rents which were recently at 4/6 a week are now 6/6 a week.

In Ainsdale, too, there is a distinct need of more houses, there being some overcrowding there, and no houses to be got. In both Crossens and Ainsdale the complaint of the dearth of houses is somewhat bitter, and at times some resentment is expressed that Members of the Town Council have not themselves investigated the matter, or suggested any remedy.

COUNTY BOROUGH OF SOUTHPORT.

The number of houses in the various Wards let out at rents up to and not exceeding 8/6 per week, inclusive of rates.
 (These particulars were obtained from the Rate Books of the Corporation in May, 1913).

Gross Estimated Rentals per annum.	Weekly Rentals (including Poor and District Rates).	Total Number of Houses in the Borough at the different rentals.	Hes- keth Ward.	Scaris- brick Ward.	Park Ward.	Marine Ward.	Talbot Ward.	Sussex Ward.	Cra- ven Ward.	Central Ward.	South Ward.	Birk- dale North Ward.	Birk- dale East Ward.	Birk- dale South Ward.	Ains- dale Ward.		
Not exceeding £8 ...	3/9 .	877	400	114	36	1	4	16	3	1	10	9	3	1	6	44	29
£9	4/3	238	45	51	3	—	4	63	3	1	1	1	2	19	37	7	
£10	4/9	544	46	138	3	7	13	116	10	4	16	3	1	11	80	62	
£11	5/3	487	68	133	2	1	71	1	20	6	13	3	13	95	30	12	
£12	5/9	686	51	222	6	13	23	26	7	17	49	34	1	30	131	52	
£13	6/3	741	55	149	2	12	6	51	12	24	14	15	13	52	225	51	
£14/10/- ...	6/9	992	36	196	2	12	17	207	13	49	96	125	1	54	110	40	
£15	7/-	422	22	66	5	11	32	55	8	9	16	55	1	24	66	27	
£15/10/- ...	7/3	154	3	19	—	—	14	30	1	—	—	1	—	23	26	31	
£16	7/6	496	31	43	—	18	102	84	13	28	20	66	1	52	18	10	
£16/10/- ...	7/9	68	13	—	—	3	16	10	—	—	1	—	—	14	—	10	
£17	8/-	339	16	31	2	10	56	55	14	15	22	20	—	35	43	5	
£17/10/- ...	8/3	151	11	6	1	8	15	56	3	4	12	26	—	5	2	—	
£18	8/6	524	21	16	2	11	102	119	4	32	38	31	1	38	58	34	
		6519	836	1184	64	107	405	959	92	204	301	399	26	354	879	445	
																264	

The "Gross Estimated Rental" is the annual amount a house is let for, or if occupied by owner, is estimated by Rating Authority as capable of being let for, exclusive of Poor, District, and Water Rates.

The "Weekly Rental" is calculated on the Gross Estimated Rental plus the Poor and District Rates, but not including the Water Rate.

(3.) The Infantile Death Rate in Birkdale and Ainsdale.

INFANTILE DEATH RATES.

Year.	Southport.	Birkdale and Ainsdale.
1906	115	139
1907	98	90
1908	104	112
1909	103	96
1910	103	92
1911	113	94
1912	76	74

(4.) In 1895, Mr. Hirst, then Borough Surveyor, in his report to the Finance Committee on Workmen's Dwellings, stated that in his opinion at that time the cost (including street expenses) of erecting a suitable substantially built house with good living room, three bedrooms, water-closet and ashpit, and in blocks of four would be £180 per house and that such house after allowing for interest on capital, sinking fund, ground rent at 1d. per yard, and repairs, etc., could be let at 5/3 per week. Since that time the cost of building has gone up very greatly, so much so in fact that it is now estimated that the cost would be between 20 and 30 per cent. greater than estimated in 1895, namely to between £216 and £225 per house. This cost, and the probable increased charges for ground rent, would greatly increase the rent of such a house as was considered possible in 1895.

Mr. Ex-Councillor Packer informs me that he has recently built two pairs of houses at Crossens on the Scarisbrick Estate, with good front living room, a combined scullery and kitchen, pantry, three bedrooms, a water-closet and coal house, to let at 6/- a week (inclusive of rates).

The charge for the street expenses for these houses amounted to £37 per pair, and Mr. Packer adds that he wishes "something might be done by the Corporation to reduce these heavy charges for the making of the street."

Mr. T. Morris, Architect, in January last, wrote to me as follows:—

"By investigation I find that semi-detached houses are now being erected in High Park by practical builders at a cost slightly under 4d. a cubic foot. For one pair of houses, the charges by the Estate for street expenses, and the cost of lease and agreement and Redemption of Tithe amount to £67 13s. 6d., being one sixth of the total cost of the houses, thus adding 1s. 6d. per week to the rent of each tenement."

"A practicable remedy," he continues, "for this admitted waste of money would be an endeavour to acquire suitable and cheap building land and to develop a Garden Village for Workmen's dwellings, under the direction and with the aid of the Co-Partnership Tenants, Limited, the objects and methods of this Company being:—

(i) To provide expert advice (based on accumulated experience) of how to obtain, lay out and develop an estate.

(2) To plan the same as regards roads, number of houses to the acre, open spaces and arrangements of buildings, so as to ensure for all time healthy and cheerful houses and pleasant surroundings.

(3) To let the houses at ordinary rents to investors desiring to become tenants ; etc., etc.

"Cottages with living room (15ft. oin. \times 12ft. oin.), scullery, larder, and wash-house on ground floor, and three bedrooms on first floor, built in blocks of four or six to modified byelaws in respect of the structures, the roadways and the footpaths, and grouped round open spaces, I certify (after taking into consideration existing prices of building materials and labour) could be let at 4/6 per week rental, and would pay full 7% on the outlay.

By enquiry and personal knowledge I find there are large numbers of thrifty, industrious, deserving people in the Borough sorely needing low rented houses, and it is recognised that those responsible for the management of local affairs are able to bring about a necessary reduction in the cost of estate development, and thus largely reduce the cost of building, with consequent benefit to the community.

"If desired, I would submit plans of the proposed houses and lay out the land, and submit a detailed report of a complete scheme."

Summing up the whole question, the crux of the Housing problem is, in my opinion, a scarcity of small houses in the Borough at rents suited to the means of the working classes. The practical difficulty of finding such suitable housing accommodation is well shown by a case of overcrowding which has engaged the attention of the Health Department for some weeks past. A family of father, mother, and six children at present occupy two small unsuitable rooms near St. Luke's Station. The mother, at our instigation, has been searching for at least two months for another habitation, and has not yet succeeded in finding one. At present the rent they are paying is 3/6 a week, and they can find no other place with less rent than 6/- or 7/- a week. This rent for a family of 8 persons, with the father's average wage, as a labourer, of about 24/- a week, is a very serious consideration, and even at this price they have not yet been able to find accommodation.

It has always seemed to me to be clearly the duty of the Town Council to use its powers to see that land for building purposes be obtained at a reasonable price, and without undue restrictions, and that builders should be encouraged in every way to erect houses suitable for working people. If the land could be obtained, I do not think it would be necessary, or even desirable, that the Corporation should itself engage in building operations, but feel sure that private enterprise could be trusted to supply the demand.

I am, Gentlemen, your obedient servant,

JOHN J. WEAVER,

Medical Officer of Health.

July 31st, 1913.

THE REMOVAL AND DESTRUCTION OF HOUSEHOLD REFUSE.

The Refuse Destructor at Blowick, consisting of six Horsfall back-to-back cells, was erected in 1900, and four Meldrum cells were added in 1907, making a total of 10 cells. During the summer months, six cells are in use, and eight cells during the winter months.

The erection of a new Destructor at Blowick to deal with the Refuse of the whole Borough, is in contemplation.

Of the 17,227 tons of refuse collected in the Southport portion of the Borough, 13,869 tons were burnt at the destructor, and the remaining 3,358 tons tipped on vacant land. The cost per ton for burning is about 1s. 6d. In Birkdale and Ainsdale, about 6,000 tons of refuse were collected, and in the absence of a destructor, tipped on vacant land.

The amount of refuse removed annually from the whole Borough is about 23,230 tons.

The use of metallic ashbins is being constantly encouraged, and their number is steadily increasing. The average number of houses converted from the use of fixed ashpits to the ashbin system is 353 per annum. The active support of the public generally in the provision of the more rapid and cleanly method of dealing with household refuse by the use of the metallic ashbins is most earnestly desired.

At the end of the year the number of ashpits in the enlarged Borough was about 9,700. There were at the same time 4,540 bins in use, and these are emptied every week. Within the Southport portion of the Borough, but outside the seweraged area, there are about 40 privies. In Birkdale and Ainsdale there are about 900 privies. They are being abolished in Birkdale, and in Ainsdale will be abolished as soon as the sewerage scheme, at present in hand for that township, has been carried out.

WORK DONE BY INSPECTORS OF NUISANCES.

Article XIX. (14) of the General Order of the Local Government Board (13th December, 1910) required that the Inspector of Nuisances should furnish an account of the number of inspections and notices, etc., served by him during the year, but as Inspector Kirkbride, the official here referred to, is not in Southport engaged in this kind of work, the following table shows the amount and nature of work done by the other Inspectors of Nuisances. Each of these inspectors has also prepared for presentation to the Committee a separate report on his year's work :—

	1911.	1912.	1913
Nuisances reported to Health Committee ...	1726	1095	2245
Nuisance Inspections not reported to Health Committee	14142	9889	19837

	1911.	1912.	1913.
Visits to Workshops (and reports)	415	477	803
„ Bakehouses (and reports)	169	99	165
„ Laundries	16	24	60
„ Dairies, Cowsheds and Milkshops....	352	386	551
„ Common Lodging Houses	442	477	424
Visits under Shops Acts	—	3148	3177
Visits in connection with offensive trades	236	236	227
Notices served	983	674	1179
Houses without proper Water Supply reported	0	6	3
Smoke Prevention observations	5	4	51
Houses disinfected	257	279	461
Inquiries into Notifications of Infectious Diseases	1290	2004	2172
Removal of Cases to Hospital	106	82	96
Houses examined and reported as unfit for habitation	14	0	9
Visits to Ice-cream Vendors	30	20	36
„ „ Piggeries	660	680	400
Examinations and Testing of House Drains and Sanitary Fitments	814	793	575
Sanitary Certificates issued	13	18	28

In the case of the above Nuisances reported to Committee, 2,245 orders for abatement were issued, and about 97 per cent. were complied with by the close of the year.

SANITARY ADMINISTRATION

During the year 1913, the staff of the Health Department was enlarged, and now consists of the following :—

- A. Kendall, Chief Clerk and Sanitary Inspector ;
J. L. Kirkbride, T. Cadwell, W. Halsall, and J. Peet, Sanitary
Inspectors ;
H. Hartley, Meat and Food Inspector ;
H. Foden, Inspector under Shops and Workshops' Acts, and for
Prevention of Smoke ;
P. Wright, Disinfector ;
S. J. Wilde, Assistant Sanitary Inspector ;
Kenneth Aspinwall and Alan Knowles, Junior Clerks ;
Health Visitors—Miss Willder, Tuberculosis Nurse and Inspector
of Midwives ;
Miss Gibson, Infant Mortality Nurse.

The adoptive Acts in force in Southport are the following:—

- Infectious Disease (Notification) Act, 1889.
- Infectious Disease (Prevention) Act, 1890.
- Public Health Acts Amendment Act, 1890.
- Housing of Working Classes Act, 1890. Part III.
- Public Health Acts Amendment Act, 1907 (partly).
- Notification of Births Act, 1907.

Valuable Sanitary Clauses are contained in—

- Southport Improvement Act, 1885.
- Southport Corporation Act, 1900.
- Southport Corporation Act, 1913.
- The Cleansing of Persons Act, 1897, is made use of when necessary.

PUBLIC ELEMENTARY SCHOOLS.

The School Medical Department is under the able and energetic supervision of Dr. Barnes.

Although it is independent of the Health Department, complete co-ordination and co-operation exists between the two departments, and every assistance is given by Dr. Barnes and his staff in all matters of public health. There is also complete interchange of information between the departments as to the prevalence of infectious disease, and as to the steps being and to be taken to control and prevent it.

During the year several of the Public Elementary Schools were closed for short periods (the longest period of closure being for 16 days) on account of measles.

At the beginning of the year a Dental Clinic was established, and Mr. Duguid was appointed as School Dentist, and very satisfactory dental work among the school children has since been done. I have visited the Dental Clinic on several occasions and have been much impressed by the value of the work done, and also by the tact and sympathetic manner with which the children are treated. It was a complete surprise to me to see the way children went up to the dentist to have stumps extracted and other defects remedied, and left the chair afterwards without a murmur or a tear. Such work, continued for a few years, will make a vast difference in the health and comfort of the rising generation.

Free Meals were supplied to a certain number of children living in the Boundary Street area for a few months during the year. The number of children fed was about 70, and the number of meals 2373.

The question of Open-air Schools for a certain class of pupil has also engaged the attention of the Education Committee, and in the erection of any additional schools in the Borough will be fully borne in mind by the Committee.

SMOKE PREVENTION OBSERVATIONS.

Fifty observations were taken in 1913, and in five cases legal notices were served upon persons for contravention of the Act. In each case the nuisance was abated.

SHOPS ACT, 1904-12-13.

The administration of this Act is in Southport carried on by the Health Department. In some towns it is carried out by the Police.

Inspector Foden has been appointed as the Inspector locally to carry out the Act. The Borough is divided up into various areas, and each area has decided upon its half-days of closing, and also its closing hours at nights. The arrangements may be summarised as follows:—

Southport Town Area Closed generally for the weekly half-holiday
on Tuesdays; some on Saturdays.

Birkdale Do. do. do.

High Park Area,—including
Churchtown, Marshside,
Crossens, & High Park...Closed on Wednesdays.

Blowick Do.

Ainsdale Have the option of closing any half-day,
but have generally adopted Wednesday.

Southport, being a seaside resort, is allowed to have in each year an exemption period of seventeen weeks, during which period the shops are not required to close for the usual half-day. This seventeen weeks is not continuous, but is divided up into various periods, and the exemption is applicable to the whole Borough. An exemption period from early closing at nights is also in force, in Southport Town Area, from June until September. The other areas in the Borough have an exemption period at nights, which chiefly applies to the weeks preceding and succeeding the Bank Holidays.

The chief requirements of the Act are:—That the shops close for the weekly half-day; that the shop assistants receive one half-day holiday per week; that sitting accommodation is provided for all female assistants; and that proper meal hours are given to all assistants.

There are approximately 2,000 shops which, for the purposes of these Acts, come under the supervision of the Inspector.

During the year 1,814 visits by the Inspector were paid to shops, viz.:—1,780 day visits, and 34 night visits. Of 37 cases reported for offences committed, one was prosecuted, and to the others letters of warning were sent from the Town Clerk's Office. For technical offences, 337 shopkeepers were verbally warned by the Inspector, and also 96 letters of warning were sent.

Owing to the newness of the Act, a little latitude was given to the shopkeepers, as the Authority were satisfied, from explanations given, that in the majority of cases the offences were committed in ignorance.

Fifteen letters of complaint were received by the Inspector, each of which received due attention.

In very few cases was it found that the assistants were being deprived of the half-holiday.

SLAUGHTER-HOUSES AND MEAT AND FOOD INSPECTION.

The inspection of meat is carried out by Inspector Hartley, who although he does not hold a special certificate in meat inspection, was, before his appointment a practical butcher, and engaged in the trade of a butcher. He devotes the whole of his time to his duties and visits the public and private slaughter-houses frequently, and as often as possible during the time of slaughtering. At the public slaughter-houses there is also a caretaker, whose duty it is, in the absence of the Meat Inspector, to note anything of an unusual or suspicious character in the animals or the meat, and at once to inform the Inspector.

The following visits were made by Inspector Hartley during the year :—

To the Market Hall	296	visits.
To the Public Slaughter-houses	350	"
To the Private Slaughter-houses	311	"
To Pig-keepers' Premises	400	"
To Ice Cream Works	36	"
To Offensive Trades	226	"
To Tripe Boilers', Tradesmen's and other Premises	3300	"
—		
Total Visits	4919	

There are two Public Slaughter-houses in the Borough, viz., one at Blowick, and one in Broome Road, Birkdale ; and seven Private Slaughter-houses (two in Birkdale, and five in Southport).

At the two Public Slaughter-houses (one in Southport and one in Birkdale) during the year, 21 carcases, viz., of 20 cows, and 1 heifer, were found seriously affected with Tuberculosis, and were destroyed. Ten other carcases were found affected at a Private Slaughter-house at Crossens, and destroyed.

Ten pigs affected with Tuberculosis were discovered slaughtered on private premises, and were destroyed.

The number of animals slaughtered annually in the Borough for human consumption is shown in the following table :—

	In Public Slaughter-houses (Southport).	In Public Slaughter-houses (Birkdale).	In Private Slaughter-houses (numbers estimated).
Cattle	1085	540	892
Sheep	21373	5290	10916
Calves	900	120	440
Pigs	85	30	320
	—	—	—
Total	23443	5980	12568

A large number of pigs (estimated at about 1200) are killed annually on private premises.

From April, 1910, to June, 1913, our Meat and Food Inspector (Inspector Hartley) acted as an Inspector for the West Lancashire Rural District Council, in order that he might regularly inspect a Slaughter-house situated just outside our Borough boundary, where a considerable amount of slaughtering has been going on for many years. During his tenure of this appointment, Inspector Hartley discovered at this Slaughter-house a large number of carcases totally unfit for human food. Some of these carcases were considered fit to be used as food for the wild beasts at Zoo Park, and the remainder were condemned and destroyed. In June, 1913, the West Lancashire Rural District Council appointed an inspector of their own for this duty, and he now lives in the district.

In all cases in which diseased carcases are found at the Slaughter-houses or elsewhere, visits are made to the premises from which the animals come, and every precaution, in the way of disinfection, etc., of the premises, is taken to safeguard the public health.

During the year several sheep were found dead in the fields and in the cattle pens at the slaughter-houses. These were destroyed.

The following foodstuffs were found unfit for food, and were destroyed. In most cases the goods had arrived in bad condition on account of the weather, or through delay in transit :—

- 10 tins of Prawns,
- 15 dozen tins of Crabs,
- 1 barrel of Oysters,
- 6 dozen Crabs,
- 23 boxes of Tomatoes.

THE PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

The above Regulations came into operation on the 1st day of October, 1912, and under them—

- (a) No person is allowed to add any preservative substance to milk intended for sale for human consumption ;
- (b) The nature and quality of preservative permitted to be added to cream are defined ;
- (c) Cream to which any preservative is added has to be in all cases described as "preserved cream," and clearly labelled as such, and the amount of preservative in it indicated ; and
- (d) In the schedule of the Regulations the type and size of label are definitely prescribed.

Of 96 samples of ordinary milk, and 2 of dried milk, taken during the year, 88 were found genuine. The remaining 10 samples (1 taken informally) varied in their content of fat, and were dealt with as shown under the paragraph in this Report dealing with the samples taken under the "Sale of Food and Drugs Acts," but in no case was any preservative found on analysis. Five samples of preserved cream were taken during the year, and all were found to comply with the Regulations as to the amount of preservative indicated on the label. The amounts of preservative (Boric Acid) were respectively as follows :—.42%, .41%, .14%, and .22%.

Two samples of Fresh Cream were taken. Of these one was genuine, and the other contained (in contravention of the Regulations) .27% of Boric Acid, and the Vendor was written to by the Town Clerk. In one case a Vendor sold some preserved cream out of a vessel on the counter not labelled as containing preserved cream, but the customer's vessel into which it was poured was properly labelled by the Vendor, and the cream was sold to the Purchaser as preserved cream. In this case the Vendor was warned of his breach of the Regulations.

In all other cases the Regulations as to vessels containing preserved cream being properly labelled were complied with.

PUBLIC WATER SUPPLY.

The town's water is supplied by the Southport, Birkdale, and West Lancashire Water Board, and is obtained from deep wells in the New Red Sandstone near Ormskirk, about eight miles from Southport. Though somewhat hard from the presence of carbonate of lime (which, however, is partly removed on boiling), it is, as the analysis by Professor Thresh, of London, shows, of exceptional purity. A copy of this analysis will be found at the end of this Report.

By the courtesy of the Board I had the opportunity, about two years ago of visiting and inspecting all the pumping stations and reservoirs of the Board, and was much impressed with the excellent provision that has been made for the future. By those competent to speak with authority, I was assured that it is considered that good provision has now been made for the water supply of Southport and district for at least the next 30 or 40 years, and I saw no reason whatever to doubt the accuracy of the statement.

CLOSET ACCOMMODATION.

Although Part III. of the Public Health Acts Amendment Act, 1907, has not yet been put in force in the Borough, all privies, with the exception of a few in parts of the Borough too far removed from any sewer for conversion, have now been for some years back entirely abolished and proper ash pits and water-closets substituted. Up to about six years ago, waste-water closets of the Bristol eject type, were allowed to be put in new buildings, but since that time water-closets of a more modern type only have been allowed.

THE SEWAGE WORKS AT CROSSENS.

The Sewage Disposal Works erected at Crossens, about three miles to the north of Southport, and for which the Local Government Board sanctioned a loan of £35,000, comprise six sedimentation tanks, holding approximately $2\frac{1}{3}$ million gallons of sewage, and 14 percolating filter beds, each 100 feet in diameter. By these means an excellent effluent is being obtained, and an uninterrupted flow of sewage maintained at all states of weather or tide. Two new Sedimentation Tanks have recently been constructed for taking the additional sewage from Birkdale and Ainsdale.

There has also recently been installed, at a cost for plant and land of about £6,000, a thoroughly up-to-date Sludge-pressing Plant, for dealing with the sludge drawn off from the sedimentation tanks. The sludge is now pressed into practically inodorous cakes.

The plant comprises sludge tanks, lime mixer, sludge mixer, sludge rams, air compressors and receivers, and three presses, and is capable of dealing with 100 to 200 tons of wet sludge per day.

BIRKDALE AND AINSDALE SEWERAGE SCHEME.

The construction of the new Low Level Sewer for linking up the Birkdale Sewers with those of Southport is now well advanced, and is being rapidly pushed forward towards Ainsdale. The portion already completed is conveying about one-half of the sewage of Birkdale through the Southport Main Sewers to Crossens, where it is being treated at the Sewage Disposal Works. The necessary extensions to these works—with the exception of the additional Filter Beds—are now complete. It is expected that by about the end of July (1914) the whole of the Birkdale Sewers will be linked up and the sewage conveyed to Crossens.

The laying of Sewers in Ainsdale has been commenced, and is being pushed forward with all speed.

The Covered Storm Water Tank behind the Recreation Ground adjoining the Southport Cemetery, is in course of construction.

AINSDALE.

As soon as the above-mentioned sewers are completed in Ainsdale, all the houses will be connected up with them, and the present cesspools be abolished. The health of Ainsdale remains excellent, as the following figures show :—

Estimated Population	2130.
Births in 1913	55, or rate of 25.82 per 1,000 of population.
Deaths in 1913	20, „ 9.39 „
Infantile Deaths	1, „ 18. per 1,000 births.
Zymotic Deaths	0, „ 0.0 per 1,000 of population.

GENERAL SANITARY WORK.

The following table shows the nature and amount of work done during the year by the Highway Department under orders sent to it by the Health Department, and also the corresponding figures for the two preceding years :—

	1911	1912	1913
Houses re-drained	90	94	67
House drains unstopped	566	719	657
Midden privies converted into W.C.'s	12	31	137
Bristol-ejects and trough closets converted into W.C.'s	14	23	16
Wet ashpits converted into dry ...	11	30	73
Sundry structural nuisances abated	1872	1853	1332
	—	—	—
Totals	2565	2750	2282

RAG FLOCK ACT, 1911, AND THE RAG FLOCK REGULATIONS, 1912.

Under the above Act and Regulations, which came into force on 1st July, 1912, the sale and use of flock, manufactured from unclean rags is prohibited. In 1913, 13 premises were visited by Inspector Halsall for the purpose of inspection, and two samples of flock were taken and submitted to analysis. One of the samples complied with the Regulations ; the other sample contained more than eleven times the amount of impurity allowed by the Rag Flock Regulations, 1912. The vendor was proceeded against in the Petty Sessions Court. The magistrates, however, dismissed the case on a technical point raised by defendant's solicitor, but offered to state a case for the opinion of the High Court, as they considered the case a matter of great public interest. The matter has not since been proceeded with.

WART DISEASE OF POTATOES ORDER, 1912.

Three notices of the existence of this disease were received during the year 1913, and all the instructions of the Board of Agriculture and Fisheries as to lifting potatoes, burning haulms, service of notices and closing of ground for potato growing were carried out in each case. During the potato lifting season the Inspector under the Order made six visits to various farms and gardens, but did not find any unreported cases.

THE AMERICAN GOOSEBERRY MILDEW (FRUIT) ORDER, 1912.

As this disease was not reported to have broken out in the country during 1913, the Inspector took no action under the Order.

SAMPLES OF FOOD AND DRUGS TAKEN FOR ANALYSIS, 1913.

Under the provisions of the "Sale of Food and Drugs Acts," the following samples were taken :—

	No. of Samples taken.	Result.
Milk	96	86 samples (seven taken informally) were genuine. 10 samples (9 taken formally and one informally) were found to be adulterated as follows :—
		One sample (No. 26) deprived of 10% of fat. Case tried at Petty Sessions and dismissed.
		One sample (No. 62) deprived of 4% of fat. Case tried at Petty Sessions and dismissed—each side to pay own costs.
		One sample (No. 86) deprived of 3% of fat. Vendor written to by Town Clerk.
		One sample (No. 87) deprived of 3% of fat. Vendor written to by Town Clerk.
		One sample (No. 88) deprived of 17% of fat. Summons issued to appear at Petty Sessions and withdrawn by the Authority after an explanation by the vendor (see below).
		One sample (No. 90) deprived of 3% of fat. Vendor written to by Town Clerk.
		One sample (No. 128) deprived of 3% of fat. Vendor written to by Town Clerk.
		One sample (No. 142) deprived of 2% of fat. Vendor written to by Town Clerk.
		One sample (No. 199) deprived of 2% of fat. Vendor written to by Town Clerk.
		The informal sample (No. 98) deprived of 12% of fat. This sample was taken direct from cows to verify the explanation given by vendor of sample No. 88.

	No. of Samples taken.	Result.
Butter	26	25 samples (16 formal and 9 informal) were genuine ; and one (formal) sample was adulterated as follows :—
		One sample (No. 50) contained 70% Margarine. Case tried at Petty Sessions. Vendor convicted and fined 10/- and costs 13/6.
Dried Milk	2	Genuine, taken informally.
Condensed Milk	1	Genuine, taken informally.
Fresh Cream	2	One sample (taken informally). Genuine.
		One sample (No. 150, taken formally), contained .27% of Boric Acid. Vendor written to by Town Clerk.
Preserved Cream	5	One sample taken formally and the other four informally, all contained Boric Acid as follow :—
		No. 150, .42%
		No. 152, .41%
		No. 157, .14%
		No. 158, .41%
		No. 159, .22%
Lard	5	Taken formally. Genuine.
Cheese	7	Taken informally. Genuine.
Coffee	7	Five taken formally and two taken informally. Genuine.
White Pepper	7	All taken formally. Genuine.
Baking Powder	4	All taken informally. Genuine.
Rough Shrimps	1	Taken informally, contained 62 grs. Boric Acid per pound.
Picked Shrimps.....	1	Taken informally. No. 58 contained 71 grains Boric Acid and 25 grains Benzoic Acid per pound. Vendors communicated with.

	No. of Samples taken.	Result.
Potted Shrimps.....	5	All taken informally, One Genuine. Others contained :— No. 165—59 grains Boric Acid per lb. No. 166— 8 grains Boric Acid per lb. No. 167—52 grains Boric Acid per lb. No. 67—29 grains Boric Acid per lb. and 10 grains Benzoic Acid per pound.
Brawn	3	All taken informally. One Genuine. One (No. 194) contained 13 grains Boric Acid per pound, One (No. 75) contained 36 grains Boric Acid per pound.
Potted Meat	3	All taken formally. One (No. 122) contained 25 grains Boric Acid per pound ; One (No. 177) contained 25 grains Boric Acid per pound ; One (No. 197) contained 17 grains Boric Acid per pound.
Black Puddings	1	Taken informally : Genuine.
Sausages	2	Taken informally : One (No. 174) contained 7 grains Boric Acid per pound ; One (No. 186) con- tained 29 grains Boric Acid per pound.
Shredded Beef Suet ...	1	Taken informally : Genuine.
Ground Rice	3	All taken informally : Genuine.
Arrowroot	2	One taken formally, and one informally : Both Genuine.
Cornflour	1	Taken informally : Genuine.
Semolina	1	Taken informally : Genuine.
Ground Ginger	1	Taken informally : Genuine.
Curry Powder	1	Taken informally : Genuine
Sugar	1	Taken informally : Genuine.
Jam	4	All taken informally : 3 Genuine. One (No. 215) contained .9 grain Salicylic Acid per pound and a Red Dye.

	No. of Samples taken.	Result.
Olive Oil	3	All taken informally : Genuine.
Camphorated Oil	1	Taken informally : Genuine.
Castor Oil	1	Taken informally : Genuine.
Glycerine	1	Taken informally : Genuine.
Cough Mixture	1	Taken informally : Genuine.
Epsom Salts	3	All taken informally : All Genuine.
Borax	7	One (No. 40) taken formally, contained .2 grain Arsenic per pound. Six taken informally : Two Geniune and three contained Arsenic as follows :— One (No. 33)—.06 grain per pound. One (No. 72)—.06 grain per pound. One (No. 136)—30 parts per million.
Sweet Spirit of Nitre ...	1	Taken informally : Genuine.
Lime Juice.....	2	One (No. 180) taken formally contained 1.5 grains Salicylic Acid per pint ; One taken informally : Genuine.
Fruit Wine	2	Both taken formally : One Genuine. One (No. 198) contained 11 grains Salicylic Acid per pint. Vendor written to by Town Clerk.
Raspberry Vinegar	1	Taken informally : Genuine
Grape Juice	1	Taken formally (No 216) contained 2.4 grains Salicylic Acid per pint.

THE ADMINISTRATION OF THE FACTORY AND WORKSHOP ACTS.

The condition of the Factories and Workshops in the Borough was, on the whole, satisfactory. The principal defects to which attention has been given have been want of cleanliness, and in some cases want of separate closet accommodation for the two sexes ; also a few of the water-closets were found not sufficiently screened off, and without fastenings on the doors ; in several cases water-closet doors have been found opening directly into workrooms, and these have been remedied. The premises of all home-workers were visited, and found to be clean and in a satisfactory condition.

The list of outworkers were in all cases forwarded twice a year without default.

No legal proceedings were taken during the year.

The sanitary condition of the bakehouses generally in the Borough was good. Attention was given to slop waste pipes, and in a considerable number of cases, where they were found not trapped, these were remedied by fixing lead-drawn traps on the existing pipes.

Special attention has been again given during the year to the covering and cleaning of the hot-water tanks fixed on the top of ovens in bakehouses. From these tanks water is drawn for mixing with the flour.

There are seven Chinese laundries in the Borough, at which about 20 Chinamen, but no women, are employed. The sanitary regulations have been in all cases complied with by them.

MIDWIVES ACT OF 1902.

The number of midwives enrolled in Southport at the end of 1913 was 16.

During the year two of the midwives formerly in practice in Southport died, two left the Borough, and there was one new arrival.

The duties imposed upon the Corporation by the Midwives Act have been carried out during the year, and all the midwives visited and their case books, appliances, etc., examined. Their attention has again also during the year been called to the importance of taking the temperature and pulse of patients, with a view of obtaining early information of puerperal fever, etc.

Nurse Willder was appointed, in November, 1912, as Inspector of Midwives, and in that capacity it is her duty to visit all Midwives who practise in the Borough independently of Medical Practitioners, and to inspect their appliances, and see that all the Rules and Regulations of the Central Midwives Board are being complied with.

Temperature Charts, also, for the record of the patients' temperatures, have been supplied to all the Midwives.

The following table gives the causes for which the Midwives required medical assistance during the year —

Premature Birth or Abortion	5
Abnormal Presentation	5
Ante-partum Hæmorrhage	1
Post-partum Hæmorrhage	2
Retained Placenta	1
Ruptured Perineum	9
Malformation of Child.....	2
Obstructed or Delayed Labour	16
Not definitely specified	6

47

The number of Stillbirths notified by Midwives was 12.

SANITARY IMPROVEMENTS IN HAND OR IN CONTEMPLATION.

BIRKDALE AND AINSDALE MAIN SEWERAGE.

In accordance with the Southport Extension Order of 1911, the Corporation obtained permission from the Local Government Board for a loan of £60,000 to provide Ainsdale with a system of sewerage and surface water drainage, and to connect the Ainsdale, Birkdale, and Southport system of sewers to the Sewage Disposal Works at Crossens. The Cesspools in Ainsdale will be done away with as soon as the Sewerage Scheme is completed. At the Crossens Sewage Disposal Works, two new Sedimentation Tanks and large Gas Engine have been installed to deal with the sewage from Birkdale and Ainsdale, and the laying of the main sewers connecting up Birkdale and Ainsdale is progressing satisfactorily.

SUBSTITUTION OF SANITARY GULLIES FOR CATCHPITS IN ROADWAYS.

The Corporation obtained a loan of £6,000 for replacing the old and insanitary catchpits in the roadways with proper stoneware trapped gullies which are cleaned out every two or three weeks. Owing to difficulties in construction, the old catchpits were emptied about once a year. The alterations are now in hand.

PROPOSED SUBSTITUTION OF ASHBINS FOR ASHPITS.

In the Bill recently before Parliament, the Corporation also obtained powers to require the substitution of sanitary closed ashbins for the ashpits at present in use in the larger part in the Borough.

The Ashbin System will enable a weekly clearance to be given at a less cost than the present clearance of ashpits at 2 to 4 weeks intervals.

At the end of this Report will be found four tables of statistics, made out according to the forms required by the Local Government Board ; two tables dealing with Infectious Diseases ; two tables of the Vital Statistics of Southport for the last 42 years ; and a Report on the administration of the Factory and Workshop Acts in Southport.

The Meteorology of Southport and District is dealt with separately in the Annual Reports of the Fernley Observatory by Mr. J. Baxendell, F.R.Met. S.

I am, Gentlemen,

Your obedient Servant,

JOHN J. WEAVER.

Town Hall, Southport,
20th May, 1914.

REPORT ON THE EXAMINATION OF A SAMPLE OF WATER FROM
THE CORPORATION OF SOUTHPORT, by JOHN C. THRESH, D.Sc.
(Lond.), M.D. (Vic.), D.P.H. (Camb.), Lecturer on Public Health, London
Hospital Medical College; Medical Officer of Health, Essex County Council;
Fellow of Institute of Chemistry; Member of Society of Public Analysts,
etc., etc.; Author of "Water and Water Supplies," "Water Analysis," etc.

Date, December 6th, 1909.

Public Health Laboratories,

London Hospital Medical College, London, E., and Chelmsford.

Report on Sample of Water from Southport, taken on November 29th, 1909,
from tap at 10 Lord Street West.

This water contains no objectionable saline matter, though it is hard. It is of great organic purity, and examined bacteriologically no bacteria indicating the presence of polluting matter could be discovered. The hardness is practically the same as when previously examined. There has been a slight variation in the saline constituents, but these do not affect the quality of the water.

It is a wholesome water for drinking purposes, and a purer water could not be desired.

(Signed) JOHN C. THRESH.

DATA.

Respecting a sample of water from Southport Corporation received November 30th, 1909.

Labelled: "Taken from a draw-tap connected direct with the main at 10 Lord Street West, Southport."

Particulars of Source: 10-45 a.m., 29/11/09. Signed:—
A. Kendall, Town Hall, Southport. Sealed.

PHYSICAL EXAMINATION.

Turbidity: Clear and bright.

Colour: Faint green tint. Odour: None. Reaction: Alkaline to lacmoid.

CHEMICAL EXAMINATION.

Results expressed in parts per 100,000.

Ca. 7.5	Mg. 2.5	Na.	Fe. .0	CO ₃ 15.0	SO ₄ 3.8	Cl. 3.9	NO ₃ 1.0		Probable Combinations.
7.5	...	...	...	11.25	...	...	...	...	Calcium Carbonate 18.75
...	1.5	...	...	3.75	...	...	...	...	Magnesium Carbonate 5.25
...	1.0	...	...	...	3.9	...	...	...	Magnesium Sulphate 4.9
...	...	2.5	...	...	...	3.8	...	...	Sodium Chloride... 6.3
...	...	.35	...	...	...	...	1.0	...	Sodium Nitrate ... 1.35
...	...	...	...	...	...	...	...	...	Silica, etc. .... .25

Total solid constituents dried at 180°C..... 36.8

NOTE.—To convert the above parts per 100,000 into grains per gallon, multiply by .7.

	Results in Grains per gallcn.	Parts per 100,000.
Hardness, Temporary, 14°, Permanent 6.3°...Total	20.3°	...
Free Ammonia	0.0063	0.0090
Organic Ammonia	0.0008	0.0012
Oxygen absorbed in 3 hours at 37°C	0.0112	0.0160
Nitrites	Nil	Nil

(Signed) JOHN C. THRESH and JOHN F. BEALE.

Dec. 6th, 1909.

London Hospital Medical College, London, E., and Chelmsford.

Report on the Bacteriological Examination of a Sample of Water received
on November 30th, 1909, from Southport Corporation:—

Source: Tap on main at 10, Lord Street West, Southport.

Number of organisms per cubic centimetre capable of
growing on alkaline nutrient jelly at 20°C in 4 days,
and counted by aid of pocket lens 103

Number of organisms on Agar per c.c. in 24 hours 22

Smallest quantity of water in which growth occurred with
production of acid and gas in bile salt, glucose broth
(1, 5, 10, or 20 c.c.) 1.c.c.

Nature of organisms found in this growth : Bacillus Coli not present
in 36 c.c.

Reaction of the bacillus enteritidis sporogenes, in 10 c.c.—negative
in 100 c.c.— „ „
in 110 c.c.— „ „

(Signed) JOHN C. THRESH and JOHN F. BEALE.

FACTORY AND WORKSHOP ACTS.

The following Report is made out in accordance with the requirements of the Home Office, to whom a copy of this Report has to be sent.

Factories, Workshops, Workplaces, and Homework.

I.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
FACTORIES	32	7	None.
(Including Factory Laundries.)			
WORKSHOPS	682	130	None.
(Including Workshop Laundries.)			
WORKPLACES	35	14	None.
Total	749	151	None.

2. — DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts—*</i>				
Want of Cleanliness	85	83	None.	None.
Want of Ventilation	13	12	”	”
Overcrowding.....	1	1	”	”
Want of Drainage of Floors	”	”	”	”
Other Nuisances.....	52	48	”	”
insufficient	2	1	”	”
unsuitable or defective	6	5	”	”
not separate for sexes	4	4	”	”
<i>Offences under the Factory and Workshop Act—</i>				
Illegal occupation of Underground Bakehouse (S. 101) ...	None.	None.	”	”
Breach of special Sanitary Requirements for Bakehouses (SS. 97 to 100)	”	”	”	”
Other Offences	”	”	”	”
Total.....	163	154	”	”

* Including those specified in sections 2, 3, 7 and 8, of the Factory and Workshop Act as remediable under the Public Health Acts.

|| Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted in Southport. The standard of sufficiency and suitability of sanitary accommodation for persons employed in factories and workshops is in accordance with the Sanitary Accommodation Order of 4th February, 1903.

3.—HOME WORK.

NATURE OF WORK.* I	OUTWORKERS' LISTS, SECTION 107.							Notices served on Occupiers as to keeping or sending lists.	Inspections of Outworkers' Premises.		
	Lists received from Employers.										
	Twice in the Year. Outworkers.			Once in the Year. Outworkers.							
	+ Lists.	Con- trac'rs	Work- men.	+ Lists.	Con- trac'rs	Work- men.					
	2	3	4	5	6	7					
Wearing Apparel—											
Making, &c.	38	8	44	19	4	22	...	...	...
Household Linen .....	...	...	...	...	...	...	...	...	...
Lace, Lace Curtains & Nets	...	...	...	...	...	...	...	...	...
Umbrellas, &c.	2	6	...	...	3	...	...	...	...
Racquet and Tennis Balls..	...	...	...	...	...	...	...	...	...
Nets, other than Wire Nets	...	...	...	...	...	...	...	...	...
Basket Making	2	...	2	1	...	1	...	...	...
Total	42	14	46	21	7	23	...	...	...

* If an occupier gives out work of more than one of the classes specified in column 1, and subdivides his list in such a way as to show the number of workers in each class of work, the list has been included among those in column 2 (or 5 as the case may be) against the principal class ONLY, but the outworkers have been assigned in columns 3 and 4 (or 6 and 7) into their respective classes.

† The figures in columns 2, 3 and 4 are the TOTAL number of the lists received from those employers who comply strictly with the statutory duty of sending two lists each year and of the entries of names of outworkers in those lists.

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Dressmakers
Milliners
Tailors
Bakers
Boot and Shoe Makers
Joiners	480
Plumbers
Upholsterers
Jewellers
Cabinet Makers
Total number of workshops on Register	480

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	9
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)	Notified by H.M. Inspector Reports (of action taken) sent to H.M. Inspector
Other Matters	14
Underground Bakehouses (S. 101)—	
Certificates granted during the year	0
In use at the end of the year.....	8

May, 1914.

JOHN J. WEAVER,

Medical Officer of Health.

NOTE.—The Factory and Workshop Act, 1901 (s. 132), requires the Medical Officer of Health in his ANNUAL REPORT to the District Council to report specifically on the administration of that Act in workshops and workplaces, and to send a copy of his Annual Report, or so much of it as deals with this subject, to the Secretary of State (Home Office).

TABLE I.
Vital Statistics of Whole District during 1913 and Previous Years.

COUNTY BOROUGH OF SOUTHPORT.

YEAR.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.			TRANSFERABLE DEATHS. ^a		NETT DEATHS BELONGING TO THE DISTRICT.		
	Population estimated to middle of each year.	Un-corrected Number.		Number.*	Rate.	Number.*	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.	At all Ages.
		Nett.	Number.							10	13
1	2	3	4	5	6	7	8	9	10	11	12
1908	50,670	898	898	17.72	690	13.62	28	44	93	104	706
1909	51,027	836	836	16.38	745	14.60	16	32	86	103	761
1910	51,383	866	866	16.85	709	13.80	25	31	89	103	715
1911	51,740	784	805	15.56	701	13.55	66	70	91	113	705
1912	70,640	1028	1039	14.71	882	12.48	93	89	78	76	878
1913	71,092	1063	1083	15.23	886	12.46	53	95	101	93	928
											13.05

*In Column 6 are included the whole of the deaths registered during the year as having actually occurred within the district.

In Column 12 is entered the number in Column 6, corrected by subtraction of the number in Column 8 and by addition of the number in Column 9. Deaths in Column 10 are similarly corrected by subtraction of the deaths under 1, included in the number given in Column 8, and by addition of the deaths under 1 included in the number given in Column 9.

^a "Transferable Deaths" are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

The following special cases arise as to Transferable Deaths :—

(1) Persons dying in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) have been regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person dying in an Institution had no fixed residence at the time of admission, the death is not transferable.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement have been referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence have been referred (a) to the district of residence, under the general rule; (b) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known; (c) failing this, to the district where death occurred, if known; and (d) failing this, to the district where the body was found.

Total population at all ages	69,643
Number of inhabited houses	15,676
Average number of persons per house	4.44
Area of District in acres (land and inland water)	9426

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.

COUNTY BOROUGH OF SOUTHPORT.

NOTIFIABLE DISEASE.	At all Ages.	NUMBER OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH LOCALITY.					TOTAL CASES REMOVED TO HOSPITAL.
		At Ages—Years.								1 Six Central Wards. Est. pop., 28,889.	2 Scarisbrick and Sussex Wards. Est. pop., 13,481.	3 Park Ward. Est. pop., 5,365.	4 Hesketh Ward. Est. pop., 4,647.	5 Birkdale and Ainsdale. Est. pop., 18,258.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.	65 and upwards.							
Small-pox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera (C) Plague (P) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	42	...	8	25	2	7	...	...	22	7	...	2	11	19	
Erysipelas	35	...	...	4	6	10	11	4	15	10	3	2	5	...	
Scarlet Fever	89	...	9	60	17	3	...	...	41	19	6	1	22	56	
Typhus Fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever	4	...	...	1	...	2	1	...	...	...	...	1	...	3	...
Relapsing Fever (R) Continued Fever (C)	1(C)	...	...	1(C)	...	...	...	...	...	1(C)	...	...	...	...	...
Puerperal Fever	2	...	...	...	1	1	...	...	1	1	...	...	...	2	
Cerebro-spinal Meningitis	3	...	...	2	...	...	1	...	...	3	...	...	...	1	
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis	148	...	2	14	29	72	26	5	77	30	2	4	35	...	
Other Forms of Tuberculosis	106	...	13	57	21	12	2	1	25	19	5	31	26	...	
Chicken Pox	362	14	90	246	10	2	...	...	99	41	21	16	185	...	
Measles	1170	38	309	711	75	37	...	...	365	389	54	116	246	2	
Whooping Cough	459	33	205	208	6	6	1	...	124	169	17	70	79	...	
Ophthalmia Neonatorum	8	7	1	...	...	...	...	...	1	6	...	...	1	2	
Totals	2429	92	637	1329	167	152	42	10	770	695	109	242	613	82	

Isolation Hospitals.—Moss Lane Infectious Diseases Hospital (situated in the West Lancashire Rural District), and the Shaftesbury Road Infectious Diseases Hospital (Birkdale).

TABLE III.

Causes of, and Ages at, Death during Year 1913.

CAUSES OF DEATH.	NETT DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING WITHIN OR WITHOUT THE DISTRICT (a).						TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS" IN INSTITUTIONS IN THE DISTRICT (b).		
	All ages.	Under 1 year	1 and under 2 years	2 and under 5 years	5 and under 15 years	15 years and over	25 years and over	45 and under 5 years	45 and upwards
1	2	3	4	5	6	7	8	9	10
Certified (c)	901	96	19	12	13	31	119	228	383
All causes	27	4	1	...	1	...	3	5	13
Uncertified	...	...	...	...	...	...	...	...	...
1—Enteric Fever	1	...	...	...	...	1	...	...	...
2—Small Pox .....	...	...	...	...	...	...	...	...	...
3—Measles	3	1	...	1	...	1	...	...	1
4—Scarlet Fever	1	...	...	1	...	...	...	...	1
5—Whooping Cough	5	2	1	2	...	...	...	...	...
6—Diphtheria and Croup	2	...	...	1	...	1	...	...	...
7—Influenza	8	...	...	1	...	...	2	2	3
8—Erysipelas	1	...	...	...	...	...	1	...	...
9—Phthisis (Pulmonary Tuberculosis)	62	...	...	...	...	12	30	17	3
10—Tuberculous Meningitis	13	3	5	2	2	...	1	...	3
11—Other Tuberculous Diseases	10	2	3	...	1	...	1	2	...
12—Cancer, malignant disease	99	...	...	...	...	...	8	36	55
13—Rheumatic Fever	1	...	...	1	...	1	...	...	...
14—Meningitis (See note (d))	6	2	...	1	1	...	1	...	...
15—Organic Heart Disease	103	...	...	1	...	1	2	11	38
16—Bronchitis	60	5	1	...	1	...	...	14	39
17—Pneumonia (all forms)	70	3	3	4	2	3	11	22	22
18—Other diseases of respiratory organs	16	...	...	...	...	1	3	5	7
19—Diarrhoea and Enteritis (See note (e))	34	32	1	...	...	1	1	...	...
20—Appendicitis and Typhlitis	2	...	...	...	...	...	...	4	1
21—Cirrhosis of Liver	5	...	...	...	...	...	...	...	1
21a—Alcoholism	4	...	...	...	...	...	3	...	...
22—Nephritis & Bright's Disease	36	...	2	1	...	3	3	14	13
23—Puerperal Fever .....	...	...	...	...	...	...	...	...	...
24—Other accidents and diseases of Pregnancy and Parturition	3	...	...	...	...	...	3	...	...
25—Congenital Debility and Malformation, including Premature Birth	40	40	...	...	...	...	...	...	1
26—Violent Deaths, excluding Suicide	23	...	...	1	2	7	8	5	4
27—Suicide	10	...	...	...	3	5	1	1	2
28—Other Defined Diseases	300	10	4	...	3	2	27	63	191
29—Diseases ill-defined or unknown	10	...	...	...	...	...	2	4	4
	928	100	20	12	14	31	122	233	396
									69
Sub-Entries.									
14(a). Cerebro-spinal Meningitis		1	...	...	1	...	...	...	...
28(a). Poliomyelitis .....		...	...	...	...	...	...	...	...
included in above figures.									

* See Notes at back.

NOTES TO TABLE III.

- (a) All "Transferable Deaths" of residents, *i.e.*, of persons resident in the District who have died outside it, are *included* with the other deaths in columns 2-10. Transferable deaths of non-residents, *i.e.*, of persons resident elsewhere in England and Wales who have died in the District, are in like manner *excluded* from these columns. For the precise meaning of the term "transferable deaths" *see* footnote to Table I.

The total deaths in column 2 of Table III. equal the figures for the year in column 12 of Table I.

- (b) All deaths occurring in institutions for the sick and infirm situated within the district, whether of residents or of non-residents, are entered in the last column of Table III.
- (c) All deaths certified by registered Medical Practitioners and all Inquest cases are classed as "Certified"; all other deaths are regarded as "Uncertified."
- (d) Exclusive of "Tuberculous Meningitis" (10), but inclusive of Cerebro-Spinal Meningitis.
- (e) Title 19 has been used for deaths from Diarrhoea and Enteritis at all ages. (In the "Short List," deaths from Diarrhoea and Enteritis under 2 years are included under Title 19; those at 2 years and over being placed under Title 28).

TABLE IV.

COUNTY BOROUGH OF SOUTHPORT.

Infantile Mortality during the Year 1913.

Nett Deaths from stated Causes at Various Ages under One Year of Age.

(See Note (a) at Back).

CAUSE OF DEATH.	Under 1 week.				Total under 1 month.				Total under 3 months.				Total under 9 months.				Total Deaths under 1 year.			
	1-2 weeks.	2-3 weeks.	3-4 weeks.	1 month.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	1-3 months.	3-6 months.	6-9 months.	9-12 months.	1-3 months.	3-6 months.	6-9 months.	9-12 months.
Certified	14	10	4	5	33	16	21	21	7	7	7	7	98	98	98	98	3	3	3	3
All causes	Certified	14	10	4	5	33	16	21	21	7	7	7	98	98	98	98	3	3	3	3
	Uncertified	1	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Chicken-pox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Measles .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
{ Scarlet fever .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Whooping-Cough .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	2
{ Diphtheria and Croup .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Erysipelas .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
{ Tuberculous Meningitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
{ Abdominal Tuberculosis (b) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	2	2
{ Other Tuberculous Diseases .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meningitis (<i>not Tuberculous</i>) .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1
Convulsions	2	1	...	...	3	2	2	2	...	...	...	...	4	4	4	4	1	1	1	1
Laryngitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis .....	...	...	...	...	...	...	...	...	...	...	...	...	1	3	3	3	5	5	5	5
Pneumonia (all forms) .....	...	...	...	...	...	...	...	...	...	...	...	...	1	2	2	2	3	3	3	3
Diarrhoea .....	...	...	...	...	1	1	1	1	1	1	1	1	4	8	8	8	13	13	13	13
Gastritis .....	...	...	...	...	...	...	...	...	...	...	...	...	1	4	3	3	6	6	6	6
Syphilis .....	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	2	2	2	2
Rickets .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Injury at birth .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	1	...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	1	1
Congenital Malformations (c)	1	...	1	1	1	1	1	1	1	1	1	1	3	3	3	3	4	4	4	4
{ Premature birth	6	8	2	2	18	18	18	18	18	18	18	18	6	6	6	6	19	19	19	19
{ Atrophy, Debility & Marasmus. 4	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	11	11	11	11
Other Causes	1	...	1	1	1	1	1	1	1	1	1	1	2	2	2	2	6	6	6	6
	15	10	4	5	34	18	21	21	7	7	7	7	101	101	101	101				
legitimate	1022																			
Nett Births in the year of legitimate infants	1022																			
Nett Births in the year of illegitimate infants	61																			
legitimate infants	87																			
Nett Deaths in the year of illegitimate infants	61																			

legitimate infants

Nett Deaths in the year of illegitimate infants

NOTES TO TABLE IV.

- (a) The total in the last column of Table IV. equals the total in column 10 of Table I., and in column 3 of Table III.
 - (b) Under Abdominal Tuberculosis are included deaths from Tuberculous Peritonitis and Enteritis and from Tabes Mesenterica.
 - (c) The total deaths from Congenital Malformations, Premature Birth, Atrophy, Debility and Marasmus, equal the total in Table III. under the heading Congenital Debility, and Malformation including Premature Birth.
 - (d) For references to the meaning of any other headings, *see* notes attached to Table III.
-

In recording the facts under the various headings of Tables I., II., III. and IV., attention has been given to the notes on the Tables.

JOHN J. WEAVER,
Medical Officer of Health.

May 28th, 1914.

TABLE V.

Showing the total number of cases of Infectious Disease notified in the Borough, and the Deaths resulting therefrom, during the last 10 years (1904-1913).
It includes the Deaths which occurred both in the Borough, and in the Borough Infectious Diseases Hospital (outside the Borough).

	NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED.										Total Cases for 10 years, 1904 to 1913	DEATHS FROM INFECTIOUS DISEASE.										Case Mortality (of all cases) in Borough and Borough Hospital for 10 years, 1904 to 1913	
	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.		1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	Total Deaths during 10 years 1904 to 1913.	
Scarlet Fever	333	247	180	88	104	200	91	97	81	89	1510	10	3	10	2	1	2	1	1	a1	1	32	2.12 per cent.
Small-pox	7	...	...	...	...	...	...	...	...	...	7	2	...	...	...	...	...	...	...	...	...	2	...
Diphtheria	36	31	40	19	34	46	21	56	59	42	384	2	5	3	4	9	4	4	6	11	2	50	13.02 ,,
Typhus.....	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	10	10	13	13	16	9	7	6	6	4	94	...	2	1	3	2	...	...	1	2	1	12	12.77 ,,
Continued Fever .....	...	1	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas.....	32	22	35	27	17	24	22	15	29	35	258	...	...	3	3	...	1	...	...	2	1	10	3.87 ,,
Puerperal Fever	1	2	1	...	1	2	3	3	3	2	18	1	1	...	...	1	1	1	1	1	...	7	38.89 ,,
Cerebro-Spinal Meningitis...	...	...	...	...	...	1	...	...	3	3	7	...	...	...	...	...	...	...	3	1	4	...	...
Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	...	...	...	...	...	...	24	211	148	...	53	53	70	63	50	45	59	36	55	62	...	...	...
Other forms of Tuberculosis ...	...	...	...	...	...	...	...	...	106	...	...	...	...	...	...	...	...	...	...	...	10	...	...
Ophthalmia Neonatorum ...	...	...	...	...	...	...	...	5	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Chicken Pox	217	99	107	81	163	99	243	135	349	362	1855	...	...	...	...	...	...	...	...	...	...	...	...
*Measles	504	627	278	449	189	1183	171	868	1008	1170	6447	9	6	4	7	2	7	...	3	6	3	47	0.73 ,,
*Whooping Cough	233	70	210	227	348	19	711	120	458	459	2855	5	1	3	4	6	...	12	2	3	5	41	1.44 ,,

* Chicken Pox, Measles, and Whooping Cough were made compulsorily notifiable in Southport in May, 1902, and Cerebro-Spinal Meningitis, Poliomyelitis, and Ophthalmia Neonatorum in February, 1912.
a Death of non-resident of Southport, a patient from one of the Charitable Institutions of the town.

TABLE VI.—Cases of Infectious Disease treated in the Borough Infectious Diseases Hospitals during the last 10 years, 1904 to 1913.

	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	Totals for the 10 years, 1904 to 1913.
Scarlet Fever.....	261	177	142	60	79	160	72	75	48	56	1130
Small-pox	7	...	...	...	...	...	...	...	...	...	7
Diphtheria	3	11	18	6	23	23	6	29	23	19	161
Typhoid Fever	1	3	2	4	4	3	2	...	2	...	21
Erysipelas .....	...	...	...	...	...	...	...	1	...	...	1
Puerperal Fever .....	...	...	...	...	...	...	2	2	2	2	8
Measles .....	...	...	...	...	...	2	1	2	2	2	9
Chicken Pox .....	...	...	...	...	...	...	...	...	...	...	...
Cerebro-Spinal Meningitis .....	...	...	...	...	...	1	...	...	1	1	3
Ophthalmia Neonatorum .....	...	...	...	...	...	...	...	...	2	2	4
Totals	272	191	162	70	106	189	83	109	80	82	1344
Deaths occurred among the above cases as follows :											
Scarlet Fever.....	8	3	10	2	1	2	1	1	*1	1	30
Small-pox	2	...	...	...	...	...	...	...	...	...	2
Diphtheria .....	...	...	2	...	7	...	1	...	3	1	14
Typhoid Fever .....	...	1	...	2	2	...	...	1	...	...	6
Puerperal Fever .....	...	...	...	...	...	...	1	1	1	...	3
Measles .....	...	2	...	...	...	...	...	...	1	...	3
Totals	10	6	12	4	10	2	3	2	6	3	58

* Death of non-resident of Southport, a patient from one of the Charitable Institutions of the town.



TABLE VII.

Vital Statistics.—Borough of Southport. (Forty-one Years.)

NOTE.—The figures given in this Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I. to IV., which are corrected in accordance with the requirements of the Local Government Board, as stated in the notes appended to them.

YEAR.	BIRTHS.		DEATHS.						DEATHS FROM												DEATHS OF PERSONS AGED,						ANNUAL RATES PER THOUSAND LIVING.						Population. (Estimated to Middle of Year).				
	Male.	Female.	Male.	Female.	Resident more than One Year.	Resident less than One Year.	Bad Lives Imported	Seven Zymotic Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diph- theria.	Whoop- ing Cough.	Fever.	Diarrhoea	Cholera and Choleratic Diarrhoea	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of Respira- tory Organs.	Deaths in Public Institu- tions.	Deaths under One Year of Age to 1000 Births.	0—1.	1—5.	5—15.	15—25.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Native Phthisis.	Deaths, Zymotic.	Deaths, Respira- tory Organs, Gross.	Deaths, Respira- tory Organs, Local.	
																					0—1.	1—5.	5—15.	15—25.	25—60.	60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Native Phthisis.	Deaths, Zymotic.	Deaths, Respira- tory Organs, Gross.	Deaths, Respira- tory Organs, Local.				
1871	264	242	221	203	—	—	65	24	3	5	2	6	15	10	1	56	59	11	—	38	170	86	47	20	37	140	94	27.97	23.44	—	3.59	—	3.09	—	18,086		
1872	282	271	223	220	343	100	73	40	6	1	2	1	8	11	—	59	72	8	21	7	27	170	94	56	23	25	152	93	29.34	23.50	19.63	2.12	2.70	3.13	2.76	18,846	
1873	278	300	230	220	353	106	65	78	—	1	32	—	3	22	20	—	58	68	9	33	8	32	164	95	50	39	24	139	112	29.43	23.37	20.06	3.97	1.78	2.95	2.64	19,633
1874	331	291	257	248	387	118	85	81	—	15	27	—	3	22	14	—	64	66	15	34	11	28	178	111	67	32	21	181	93	30.39	24.67	20.52	3.95	1.56	3.13	2.59	20,463
1875	336	331	306	287	475	118	81	70	1	—	7	1	6	39	16	—	90	87	12	27	13	31	183	123	55	27	43	193	152	28.81	25.65	22.14	3.02	2.59	3.89	3.33	23,113
1876	439	424	326	305	485	146	102	85	27	1	—	5	1	33	18	—	93	83	14	34	23	44	153	132	44	28	51	215	161	33.19	24.27	20.34	3.27	1.88	3.57	2.69	25,997
1877	463	456	291	329	503	117	106	53	1	1	2	17	5	13	14	—	104	75	17	25	20	22	123	113	67	39	34	202	165	33.87	22.85	18.94	1.95*	1.84	3.83	3.09	27,132
1878	481	444	332	314	518	128	111	70	—	4	14	7	—	14	31	—	94	87	16	32	14	20	151	140	70	29	37	200	170	32.66	22.81	18.89	2.47	1.94	3.32	2.82	28,317
1879	461	465	289	328	511	106	89	25	—	1	5	2	7	2	8	—	134	68	16	19	17	29	124	115	63	26	36	213	164	31.33	20.87	17.86	.84	1.65	4.53	3.95	29,554
1880	470	452	340	367	610	97	81	49	—	4	4	3	18	7	13	—	119	70	13	22	10	26	190	176	86	33	32	200	180	29.89	22.92	20.29	1.58	1.55	3.85	3.53	30,845
1881	457	460	290	278	462	106	90	44	—	5	11	6	5	10	7	1	94	73	13	28	12	24	100	92	76	27	30	173	170	28.48	17.64	14.84	1.36	1.39	2.92	2.55	32,191
1882	451	421	263	289	450	102	91	34	—	—	15	7	4	6	2	—	108	72	8	24	17	24	119	104	73	39	27	166	143	26.24	16.61	13.87	1.02	1.44	3.25	2.74	33,232
1883	438	411	423	335	558	100	93	51	—	8	7	4	18	6	8	—	144	72	10	17	7	29	134	114	85	30	38	195	196	24.97	19.35	16.61	1.50	1.61	4.23	4.03	34,077
1884	460	416	315	302	511	106	87	36	—	3	3	10	3	5	11	1	103	78	16	20	11	25	132	116	70	25	37	164	205	25.07	17.66	15.17	1.03	1.66	2.95	2.63	34,944
1885	453	419	317	317	517	117	93	37	—	4	3	8	12	5	5	—	108	65	20	19	15	28	141	123	71	24	27	193	196	24.34	17.72	15.10	1.03	1.28	3.01	2.60	35,833
1886	509	415	324	316	544	96	82	21	—	1	3	5	5	1	6	—	100	77	24	18	5	29	140	129	40	28	31	186	226	25.15	17.42	15.19	.57	1.61	2.72	2.59	36,745
1887	413	413	316	362	575	103	85	36	—	10	6	7	4	4	5	—	105	67	20	17	8	33	151	125	59	30	40	190	234	21.92	17.99	15.73	.96	1.33	2.79	2.57	37,681
1888	467	460	331	370	587	114	91	25	—	—	2	18	—	3	2	—	108	72	16	23																	

TABLE VIII.

Vital Statistics.—Enlarged Borough of Southport (including Southport, Birkdale, and Ainsdale).

NOTE.—The figures given in this Table, except in columns distinguished as "native" or "local," are gross figures, without correction, and on that account may in some cases be found to differ from the figures given in Tables I. to IV., which are corrected in accordance with the requirements of the Local Government Board, as stated in the notes appended to them.

YEAR.	BIRTHS.		DEATHS.					Bad Lives Imported	DEATHS FROM										Deaths in Public Institutions.	Deaths under One Year of Age to 1000 Births.	DEATHS OF PERSONS AGED,						ANNUAL RATES PER THOUSAND LIVING.						Population. (Estimated to Middle of Year.)				
	Male.	Female.	Male.	Female.	Resident more than One Year.	Resident less than One Year.	Seven Zymotic Diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea	Cholera and Choleraic Diarrhoea	Diseases of the Respiratory Organs.	Phthisis.	Violence.	Imported Phthisis.	Imported Diseases of Respiratory Organs.	Deaths 0-1.	Deaths 1-5.	Deaths 5-15.	Deaths 15-25.	Deaths 25-60.	Deaths 60 and upwards.	Births.	Deaths, Gross.	Deaths, Local.	Deaths, Zymotic.	Deaths, Native Phthisis.	Deaths, Diseases of Respiratory Organs, Gross.	Deaths, Diseases of Respiratory Organs, Local.				
1912	526	502	430	459	787	102	88	22	—	6	I	10	3	2	—	129	55	25	12	II	87	77	79	38	33	23	259	457	14.55	12.58	11.34	31	.61	1.83	1.67	70,640	
1913	524	539	406	480	791	95	87	38	—	3	I	2	5	1	26	—	137	52	26	9	14	73	92	98	30	14	31	249	464	14.95	12.46	11.24	53	.60	1.93	1.73	71,092

